Submittal Information

Job Info:

GC:

Contractor:

Architect:

Distributor:

Date:_____

Marino\WARE®
New Jersey Plant
400 Metuchen Rd.
South Plainfield, NJ 07080
P: 800.627.4661
F: 908.412.1442

Marino\WARE®
Georgia Plant
777 Greenbelt Pkwy.
Griffin, GA 30223
P: 800.504.8199
F: 678.688.1379

Marino\WARE®
Indiana Plant
4245 Railroad Ave.
East Chicago, IN 46312
P: 219.378.7100
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Marino\WARE®
Texas Plant
10101 Bay Area Blvd.
Pasadena, TX 77507
P: 800.504.8199
F: 281.283.8105

Marino\WARE®
New York Sales Office
134 Broadway, Ste. C
Amityville, NY 11701
P: 800.627.4667
F: 631.691.1492

Marino\WARE®
Engineering Office
200 Business Center Drive
Stockbridge, GA 30281
P: 866-545-1545
F: 770.507.2605

Marino\WARE® Product Submittal Data

PRODUCT NAME: **600S162-33**

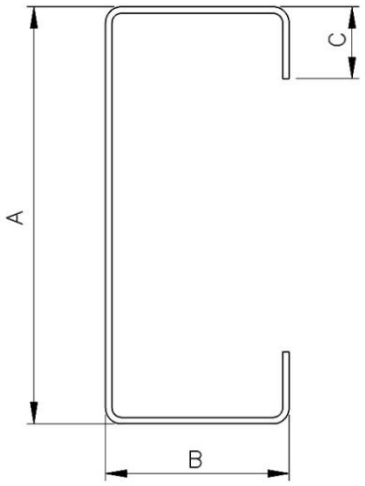
MARINO\WARE PART # 600SS20

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	6"	**Yield Strength Fy (KSI)**	33
B. Flange (in)	1-5/8"	**Tensile Strength Fu (KSI)**	45
C. Lip (in)	1/2"	**Design Thickness (in)**	0.0346"
Mils	33	**Minimum Thickness (in)**	0.0329"
Available Finish	G60, G90	**Gauge**	20

STRUCTURAL STUD



SECTION PROPERTIES

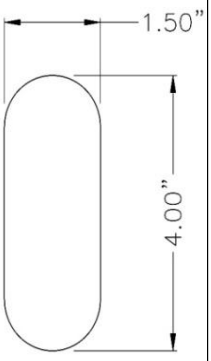
GROSS SECTION PROPERTIES

Cross Sectional Area: **A** (in^2)	0.344
Weight of Member: (lb/ft)	1.17
Moment of Inertia: **Ix** (in^4)	1.793
Section Modulus: **Sx** (in^3)	0.598
Radius of Gyration: **Rx** (in)	2.282
Gross Moment of Inertia: **Iy** (in^4)	0.116
Gross Radius of Gyration: **Ry** (in)	0.581

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: **Ixe** (in^4)	1.79
Section Modulus: **Sxe** (in^3)	0.58
Allowable Bending Moment: **Ma** (in-k)	11.41
Allowable strong axis shear away from punch: **Vag** (lb)	638
Allowable strong axis shear at punch: **Vanet** (lb)	638

Punchout



TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: **Jx1000** (in^4)	0.137
Torsional Warping Constant: **Cw** (in^6)	0.861
Shear Center to Centroid on Principal X-axis: **Xo** (in)	-1.072
Shear Center to Mid-Plane of the Web: **m** (in)	0.677
Radius of Gyration on the Centroid Principal axis: **Ro** (in)	2.587
Torsional Flexural Constant: **β** $1-(xo/Ro)^2$	0.828

CODES & STANDARDS

- AISI North American Specification 2001 with 2004 Supplement
- Framing meets ASTM A 1003, A 653, & C 955

GREEN INFO LEED® v3

Available LEED® points in the following categories:

- MR Credit 2 - Construction Waste Management (1-2 points)
- MR Credit 4 - Recycled Content (1-2 points)
- MR Credit 5 - Regional Materials (1-2 points)
- Total Recycled Content: 34.9%
- Post Consumer Content: 24.3%
- Pre Consumer (Post Industrial) Content: 9.4%

Marino\WARE® Product Submittal Data

PRODUCT NAME: **600T125-33**

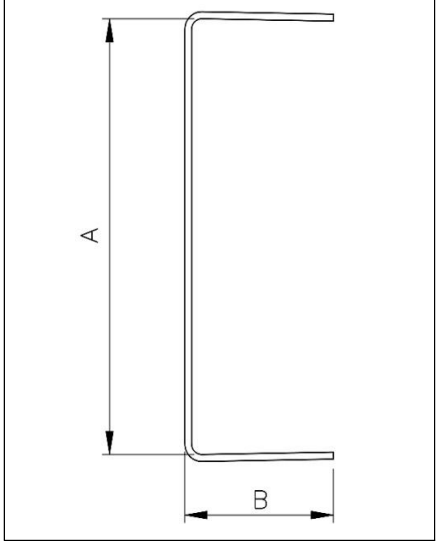
MARINO\WARE PART # 600ST20

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	6"	**Yield Strength Fy (KSI)**	33
B. Flange (in)	1-1/4"	**Tensile Strength Fu (KSI)**	45
Mils	33	**Design Thickness (in)**	0.0346
Available Finish	G60, G90	**Minimum Thickness (in)**	0.0329
		Gauge	20

STRUCTURAL TRACK



SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: **A** (in^2)	0.294
Weight of Member: (lb/ft)	1.00
Moment of Inertia: **Ix** (in^4)	1.428
Section Modulus: **Sx** (in^3)	0.465
Radius of Gyration: **Rx** (in)	2.204
Gross Moment of Inertia: **Iy** (in^4)	0.034
Gross Radius of Gyration: **Ry** (in)	0.339

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: **Ix** (in^4)	1.258
Section Modulus: **Sx** (in^3)	0.297
Allowable Bending Moment: **Ma** (in-k)	5.870
Allowable strong axis shear away from punch: **Vag** (lb)	622

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: **Jx1000** (in^4)	0.117
Torsional Warping Constant: **Cw** (in^6)	0.238
Shear Center to Centroid on Principal X-axis: **Xo** (in)	-0.516
Shear Center to Mid-Plane of the Web: **m** (in)	0.337
Radius of Gyration on the Centroid Principal axis: **Ro** (in)	2.289
Torsional Flexural Constant: **β** $[1-(xo/Ro)^2]$	0.949

CODES & STANDARDS

- AISI North American Specification 2001 with 2004 Supplement
- Framing meets ASTM A 1003, A 653, & C 955
- Galvanized steel sheet meets ASTM A 924

GREEN INFO LEED® v3

Available LEED® points in the following categories:

- MR Credit 2 - Construction Waste Management (1-2 points)
- MR Credit 4 - Recycled Content (1-2 points)
- MR Credit 5 - Regional Materials (1-2 points)

- Total Recycled Content: 34.9%
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- Pre Consumer (Post Industrial) Content: 9.4%

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F: 631.691.1492

Marino\WARE®
Engineering Office
200 Business Center Drive
Stockbridge, GA 30281
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F: 770.507.2605

Marino\WARE® Product Submittal Data

PRODUCT NAME: **362VS125-33**

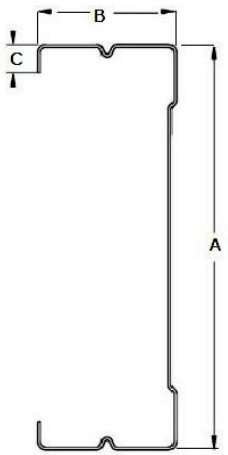
MARINO\WARE PART # 358VS33

PROPERTIES:

A. Web (in)	3-5/8	**Yield Strength Fy (KSI)**	33
B. Flange (in)	1-1/4	**Design Thickness (in)**	0.0346
C. Lip (in)	1/4"	**Minimum Thickness (in)**	0.0329
Mils	33	**Gauge**	20 STR
Finish	G40		

09.22.16 Non-Structural Metal Stud

VIPERSTUD



SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	0.750
Cross Sectional Area: **A** (in^2)	0.220
Moment of Inertia: **Ix** (in^4)	0.432
Radius of Gyration: **Rx** (in)	1.400
Gross Moment of Inertia: **Iy** (in^4)	0.040
Gross Radius of Gyration: **Ry** (in)	0.429

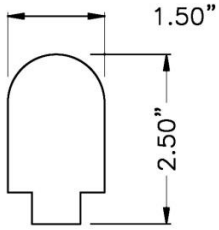
EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: **Ix** (in^4)	0.428
Section Modulus: **Sx** (in^3)	0.201

MOMENTS

Allowable Bending Moment: **Ma** (in-k)	3.960
Local Buckling Nominal Moment: **Mnl** (in-k)	6.620
Distortional Buckling Moment: **Mnd** (in-k)	6.750

Drywall Punchout



LIMITING HEIGHTS - COMPOSITE (ft-in)

	5 psf			7.5 psf			10 psf		
Spacing (in)	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
12	23-10	18-11	16-6	20-10	16-6	14-5	18-11	15-0	13-1
16	21-8	17-2	15	18-11	15-0	13-1	17-2	13-8	11-10
24	18-11	15	13-1	16-6	13-1	11-4	14-4	11-10	10-3

Composite heights sheathed both sides full height with 5/8" Type X gypsum wallboard per ASTM C 754-09.
Acceptable wallboards are 5/8" Type X from USG, National, GP, Temple, American, Lafarge & CertainTeed.
Based on AC86-2010

CODES & STANDARDS

- IBC 2009 & AISI S100-07 Compliant
- Meets or tested to: ASTM C 645, C 754, E 90 & E 119
- Galvanized steel sheet meets ASTM A 1003 & A 653
- Third Party Code Evaluation Reports: ICC ES ESR#2620 & ATI-ES CCRR-0154
- Multiple UL & Intertek Warnock Hersey Fire Rated Assemblies

GREEN INFO LEED® v3

Using products manufactured by Marino\WARE® can contribute LEED® points in the following categories:

- MR Credit 2 - Construction Waste Management (1-2 points)
- MR Credit 4 - Recycled Content (1-2 points)
- MR Credit 5 - Regional Materials (1-2 points)
- Total Recycled Content: 34.9%
- Post Consumer Content: 24.3%
- Pre Consumer (Post Industrial) Content: 9.4%

For more information, please contact Marino\WARE Technical Services at 866-545-1545.

This technical information reflects the most current information available and supersedes any and all publications, effective 10/1/2011

Marino\WARE® Product Submittal Data

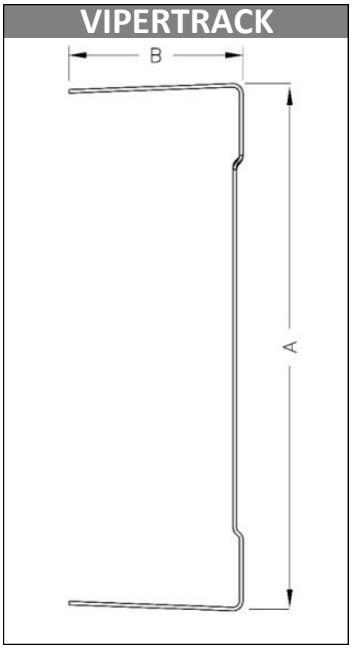
PRODUCT NAME: **362VT125-33**

MARINO\WARE PART # 358VT33

PROPERTIES:

A. Web (in)	3-5/8	**Yield Strength Fy (KSI)**	33
B. Leg (in)	1-1/4	**Design Thickness (in)**	0.0346
Mils	33	**Minimum Thickness (in)**	0.0329
Finish	G40	**Gauge**	20 STR

09.22.16 Non-Structural Metal Stud



SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: **(lb/ft)**	0.720
Cross Sectional Area: **A (in^2)**	0.212
Moment of Inertia: **Ix (in^4)**	0.443
Section Modulus about the X-axis: **Sx (in^3)**	0.234
Radius of Gyration: **Rx (in)**	1.440
Gross Moment of Inertia: **Iy (in^4)**	0.030
Section Modulus about the Y-axis: **Sy (in^3)**	0.0306
Gross Radius of Gyration: **Ry (in)**	0.377

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: **Ixd (in^4)**	0.375
Section Modulus: **Sxe (in^3)**	0.173
Allowable Moment: **Ma (in-k)**	3.430

TORSIONAL PROPERTIES

Shear Center to Centroid on Principal X-axis: **Xo (in)**	-0.657
St. Venant Torsional Constant: **Jx10^3 (in^4)**	0.0848
Torsional Warping Constant: **Cw (in^6)**	0.077
Radius of Gyration on the Centroid Principal axis: **Ro (in)**	1.630
Torsional Flexural Constant: **β=1-(xo/Ro)^2**	0.838

CODES & STANDARDS

- IBC 2009 & AISI S100-07 Compliant
- Compliant with: ASTM C 645, C 754, E 90, E 119
- Galvanized Steel Sheet meets ASTM A 1003, A 653
- Third Party Code Evaluation Reports: ICC-ES ESR#2620, ATI-ES CCRR-0154
- Multiple UL & Intertek Warnock Hersey Fire Rated Assemblies

GREEN INFO LEED® v3

Using products manufactured by Marino\WARE® can contribute LEED® points in the following categories:

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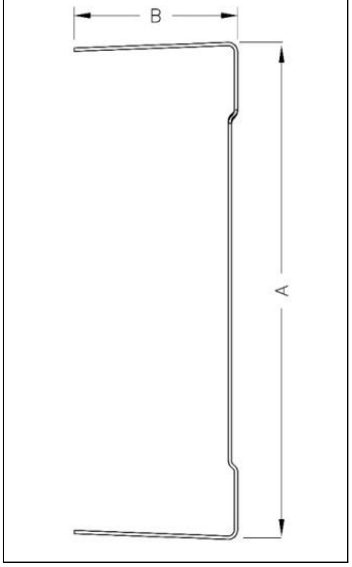
- MR Credit 4 - Recycled Content (1-2 points)
- MR Credit 5 - Regional Materials (1-2 points)
- Total Recycled Content: 34.9%
- Post Consumer Content: 24.3%
- Pre Consumer (Post Industrial) Content: 9.4%

Marino\WARE® Product Submittal Data

PRODUCT NAME: **362VT200-20**

MARINO\WARE PART # 358VT220

09.22.16 Non-Structural Metal Stud



PROPERTIES:

A. Web (in)	3-5/8	**Yield Strength Fy (KSI)**	57
B. Leg (in)	2	**Design Thickness (in)**	0.0205
Mils	20	**Minimum Thickness (in)**	0.0195
Finish	G40	**Gauge EQ**	20

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: **(lb/ft)**	0.533
Cross Sectional Area: **A (in^2)**	0.157
Moment of Inertia: **Ix (in^4)**	0.369
Section Modulus about the X-axis: **Sx (in^3)**	0.196
Radius of Gyration: **Rx (in)**	1.530
Gross Moment of Inertia: **Iy (in^4)**	0.0656
Section Modulus about the Y-axis: **Sy (in^3)**	0.0446
Gross Radius of Gyration: **Ry (in)**	0.647

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: **Ixd (in^4)**	0.190
Section Modulus: **Sxe (in^3)**	0.0604
Allowable Moment: **Ma (in-k)**	2.061

TORSIONAL PROPERTIES

Shear Center to Centroid on Principal X-axis: **Xo (in)**	-1.280
St. Venant Torsional Constant: **Jx10^3 (in^4)**	0.0219
Torsional Warping Constant: **Cw (in^6)**	0.161
Radius of Gyration on the Centroid Principal axis: **Ro (in)**	2.100
Torsional Flexural Constant: **β=1-(xo/Ro)^2**	0.630

CODES & STANDARDS

- IBC 2009 & AISI S100-07 Compliant
- Compliant with: ASTM C 645, C 754, E 90, E 119
- Galvanized Steel Sheet meets ASTM A 1003, A 653
- Third Party Code Evaluation Reports: ICC-ES ESR#2620, ATI-ES CCRR-0154
- Multiple UL & Intertek Warnock Hersey Fire Rated Assemblies

GREEN INFO LEED® v3

Using products manufactured by Marino\WARE® can contribute LEED® points in the following categories:

- MR Credit 2 - Construction Waste Management (1-2 points)
- MR Credit 4 - Recycled Content (1-2 points)
- MR Credit 5 - Regional Materials (1-2 points)
- Total Recycled Content: 34.9%
- Post Consumer Content: 24.3%
- Pre Consumer (Post Industrial) Content: 9.4%

Formaldehyde-Free™ Fiber Glass Insulation Enhanced with Bio-Based Binder

UNFACED
KRAFT FACED
FOIL FACED

PRODUCT DATA SHEET

COMPANY

Johns Manville is committed to creating more comfortable, healthier and energy efficient indoor environments. We revolutionized the building insulation industry by pioneering the development of Formaldehyde-free™ fiber glass building insulation over a decade ago. We continue to build on our legacy of innovation with a new Formaldehyde-free™ fiber glass insulation solution that utilizes an innovative bio-based binder, made mostly from rapidly renewable plant-based materials, that continues to offer excellent thermal and acoustical performance as well as improved handling, easier cutting and less dust than our previous product. At JM, we believe that in every detail, materials matter.

DESCRIPTION

JM Formaldehyde-free™ thermal and acoustical insulation is made of long, resilient glass fibers bonded with our bio-based binder. A wide range of thermal resistance R-values is available to provide thermal control for both vertical and horizontal applications. JM insulation is available unfaced or with a variety of facings, including kraft or foil vapor retarder.

USE

JM Formaldehyde-free™ thermal and acoustical insulation can be used in a wide variety of wood frame, engineered wood and steel frame construction applications, including:

New Construction: residential homes and commercial buildings interior and exterior walls, floors and ceilings for thermal and sound control, as well as basement wall insulation.

Retrofit: adding insulation to attics, crawl spaces and above suspended ceilings.

INSTALLATION

JM insulation cuts easily with an ordinary utility knife, and unfaced or tabless versions install easily by simply pressing in place between studs or joists in standard framing. Standard facings have stapling tabs for attachment to framing if additional securement is required.

PACKAGING

JM insulation is compression-packaged for savings in storage and freight costs.

DESIGN CONSIDERATIONS

Kraft and standard foil facings on this product will burn and must not be left exposed. It must be covered with gypsum board or another approved interior finish. Where an exposed application is required, use FSK-25 flame-resistant faced insulation.

In colder climate areas, vapor retarders (whether attached to the insulation or applied separately) are often placed toward the heated or conditioned side of the wall. This is done to reduce water vapor penetration into the wall from the building interior. Check your local building codes for vapor retarder requirements.

Refer to JM guide specifications for further design considerations and required installation instructions.

LIMITATIONS OF USE

Check applicable building codes.

PERFORMANCE ADVANTAGES

Formaldehyde-free: will not off-gas formaldehyde in the indoor environment.

Thermal Efficiency: provides effective resistance to heat transfer with R-values up to R-49 (RSI-8.6).

Sound Control: reduces transmission of sound through exterior and interior walls and floor or ceiling assemblies.

Fire Resistant and Noncombustible: see Physical Properties.

Durable Inorganic Glass: will not rot, mildew or deteriorate and is noncorrosive to pipes, wiring and metal studs.

Superior Performance: bonded glass fibers are dimensionally stable and will not slump within the wall cavity, settle or break down during normal applications.

ENERGY AND ENVIRONMENT

NORTH AMERICAN AVERAGE 30% POST-CONSUMER RECYCLED CONTENT ACTUAL RECYCLED CONTENT WILL VARY

ENERGY STAR PARTNER

GREENGUARD GOLD

INDOOR ADVANTAGE GOLD BUILDING MATERIALS

Formaldehyde-Free™ Fiber Glass Insulation Enhanced with Bio-Based Binder

PRODUCT DATA SHEET | **UNFACED | KRAFT FACED | FOIL FACED**

APPLICABLE STANDARDS & BUILDING CODE CLASSIFICATION**

JM UNFACED INSULATION	JM KRAFT FACED INSULATION	JM FOIL FACED INSULATION
ASTM C665, Type I; ASTM E136	ASTM C665, Type II Class C, Category 1	ASTM C665, Type III, Class B, Category 1
IBC, ALL TYPES	IBC TYPES III, IV, V	IBC TYPES III, IV, V

***JM Insulation complies with IBC (International Building Code), model code requirements for building construction types listed above.*

STANDARD SIZES**

R-VALUE (hr•ft²•°F/Btu)	RSI VALUE (m²•°C/Watts)	THICKNESS*** in (mm)	WIDTH† METAL FRAMING in (mm)		WOOD FRAMING in (mm)		
Δ	Δ	2¾ (70)	16 (406)	24 (610)		—	
11	1.9	3½ (89) 3⅝ (92)	16 (406)	24 (610)	15 (381)	19 (483)	23 (584)
13	2.3	3½ (89) 3⅝ (92)	16 (406)	24 (610)	15 (381)		23 (584)
15	2.6	3½ (89)		—	15 (381)		
19	3.3	6½ (165)	16 (406)	24 (610)	15 (381)	19 (483)	23 (584)
20	3.5	5½ (140)		—	15 (381)		
21	3.7	5½ (140)	16 (406)		15 (381)		23 (584)
22	3.9	7½ (191)		—	15 (381)		
30	5.3	10¼ (260)	16 (406)	24 (610)	16 (406)	19 (483)	24 (610)
30c	5.3	8¼ (210)		—	15½ (394)		23⅝ (600)
38	6.7	13 (330)	16 (406)	24 (610)	16 (406)		24 (610)
38c	6.7	10¼ (260)		—	15½ (394)		23⅝ (600)
49	8.6	13½ (343)	16 (406)	24 (610)	16 (406)		24 (610)

***Consult your local JM sales representative or product availability chart for available sizes and R-values (RSI-values) including wide-roll products.*
****Thickness may vary by producing location.*
†Special widths and lengths may be available. Check with your local JM sales representative. Standard product lengths include 48", 93" and 96" (1219 mm, 2362 mm and 2438 mm) batts.
ΔFor sound control applications in interior walls.
cCathedral ceiling application.

PHYSICAL PROPERTIES**

PRODUCTION	FLAME SPREAD	SMOKE DEVELOPED	VAPOR RETARDER (PERMS)	WATER VAPOR SORPTION	DIMENSIONAL STABILITY
Unfaced	<25	<50	N/A	<5%	Less than 0.1%
Foil Faced	<75	<150	0.05	N/A	Less than 0.1%
Kraft Faced	N/R	N/R	1	N/A	Less than 0.1%

***Products are tested in accordance:** R-value ASTM C518 | Surface Burning Characteristics ASTM E84 | Perm Rating ASTM E96 | Water Vapor Sorption ASTM C1104*

Kraft and standard foil facing will burn. Do not leave exposed. Facing must be installed in substantial contact with an approved ceiling, floor or wall material. Keep open flame and other heat sources away from facing. Do not place insulation within 3" of light fixtures or similar electrical devices unless device is labeled for contact with insulation. Use only unfaced insulation between wood framing and masonry chimneys. Do not use insulation in spaces around metal chimneys, fireplaces, or flues. JM Unfaced insulation is considered non-combustible by model building codes. Flame Spread 25 products are flame spread rated and can be left exposed where codes allow. See package for warnings, fire hazard and installation instructions, or call 800-654-3103.

Due to potential skin irritation, unfaced insulation should not be used for exposed applications where it will be subject to human contact.

**GREENGUARD certification is not intended for residential environments. Instead, the certification is intended only for buildings meeting ASHRAE 62.1-2007 commercial building ventilation rates. This certification is proof that the product meets the GREENGUARD Environmental Institute's indoor air quality standards and product emission standards for VOCs.*

Visit our website at **www.JM.com** or call **800-654-3103** | **Building Insulation Division** P.O. Box 5108 | Denver, CO 80217-5108

BID-0144 12/14

G-P Gypsum

DensGlass Gold®

Exterior Sheathing

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

Manufacturer

G-P Gypsum Corporation
55 Park Place, 19th floor, Atlanta, GA 30303
Technical Service Hotline 1-800-225-6119 or www.gpypsum.com

Description

DensGlass Gold® is a unique, "paperless" sheathing panel made of a treated, water resistant core, surfaced with glass mat facings and a "gold" colored primer coating. Providing superb protection from the elements, DensGlass Gold panels are resistant to decay, delamination and deterioration due to weather exposure – even during construction delays that last as long as six months after installation. DensGlass Gold panels are also mold-resistant.*

DensGlass Gold sheathing exhibits a dimensional stability that assures resistance to warping, rippling, buckling and sagging for a flat and even substrate. DensGlass Gold sheathing is noncombustible. Since DensGlass Gold panels are strong in both directions, they may be installed either parallel or perpendicular to wall framing members (always follow specific assembly installation instructions).

**when tested, as manufactured, per ASTM D 3273*

Primary Uses

Because of the superior performance of DensGlass Gold sheathing, it is specified for exterior walls, ceilings and soffits in a wide variety of applications. These include exterior insulation and finish systems (EIFS); cavity brick or stone veneer applications; cladding such as wood siding, vinyl siding, composition siding, wood shingles, shakes, conventional stucco systems, plywood siding panels; and interior finish systems that require a substrate panel with superior fire and moisture resistance.

For EIFS applications, DensGlass Gold gypsum sheathing is an ideal substrate for adhesive or mechanical application of expanded polystyrene (EPS) or extruded polystyrene insulation, and is recommended in all climate zones.

It is not required to provide a weather resistive barrier over DensGlass Gold for the protection of the gypsum sheathing itself during the 6 month exposure limited warranty.* Consult with the local building code, design professional, owner or cladding manufacturer for weather resistive barrier requirements. Manufacturers of weather resistive barriers, which include flexible membranes, peel and stick and liquid applied, have found DensGlass Gold to be a suitable substrate for their systems.

DensGlass Gold sheathing is an ideal product for exterior ceilings and soffits for both cold and warm climate zones. It resists sagging, even under exceptionally humid conditions. Panels are applied directly to structural framing. Surface and joints may be finished and painted, or surfaced with an exterior finish system.

**see written warranty for terms, conditions and limitations*

Limitations

DensGlass Gold sheathing is exceptionally resistant to weather, but it is not intended for immersion in water.

Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.

The use of forced air heaters creates volumes of water vapor which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of G-P Gypsum. Consult heater manufacturer for proper use and ventilation. Avoid any condition that will create moisture in the air and condensation on the exterior walls during periods when the exterior temperature is lower than the interior.

When DensGlass Gold sheathing panels are used in slanted wall applications, that portion of the wall must be temporarily protected from the elements by the use of a weather resistant barrier prior to application of the cladding.

Do not allow water to pond or settle on sheathing. Also, exposed wall ends such as those that may be found in parapets must be covered to prevent water from infiltrating the cavity.

G-P Gypsum does not warrant and is not responsible or liable for the performance of the cladding or exterior systems applied over DensGlass Gold sheathing. The suitability and compatibility of any system is the responsibility of the system manufacturer or design authority.

Do not laminate DensGlass Gold sheathing to masonry surfaces; use furring strips or framing.

DensGlass Gold sheathing is not intended for roof applications. For roof applications consult our DensDeck® Roof Board brochure.

DensGlass Gold sheathing is not intended for tile applications. For tile applications, consult our DensShield® Tile Backer brochure.

Limitations *continued* ⟶

Submittal Approvals

Job Name _____

Contractor _____

Date _____

Stamps / Signatures

DensGlass Gold sheathing should not be used in lieu of plywood where plywood is required.

Do not apply DensGlass Gold sheathing below grade. Always follow building code grade clearance requirements.

All design details such as fasteners, sealants and control joints, per system specifications, must be properly installed. Openings and penetrations must be properly flashed and sealed according to code and weather resistive barrier manufacturer's instructions. Failure to do so will void the warranty.

Do not use DensGlass Gold sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the face of the board, not countersunk.

Technical Data

DensGlass Gold® panels are noncombustible when tested in accordance with ASTM E 136.

DensGlass Gold sheathing exceeds ASTM C79 and C1396 sheathing standards for humidified deflection by a factor of 10 in tests over the standard for regular gypsum sheathing.

5/8" DensGlass Gold Fireguard® type X sheathing qualifies for fire-resistant constructions when tested in accordance with ASTM E 119 and can be used in the following UL assemblies: Design Nos. N501, N502, N505, U301, U302, U305, U309, U337, U342, U354, U355, U379, U411, U425, U465, U467, U473, U617, V417, V419, X508, X516.

DensGlass Gold sheathing conforms to ASTM C 1177.

Product Data

Thicknesses: 1/2" – 12.7mm; 5/8" – 15.9mm Fireguard®
Width: 4' – 1220mm standard, tolerance up to ± 1/8";
Lengths: 8', 9' or 10' standard, tolerance ± 1/4" Other lengths available upon request
Edges: Square
Conforms to ASTM C 1177, Glass Mat Gypsum Substrate for Use as Sheathing

Physical Properties

Properties	1/2 " DensGlass Gold® Sheathing	5/8 " DensGlass Gold® Fireguard®, Type X
Thickness, nominal inches	1/2"	5/8"
Width, nominal	4' ± 1/8"	4' ± 1/8"
Length, standard	8', 9', 10' ± 1/4"	8', 9', 10' ± 1/4"
Weight, lbs./M sq. ft., nominal	1900	2500
Surfacing	Glass fiber mat	Glass fiber mat
Racking strength, lbs./ft. (dry) (Ultimate – not design value)	≥540	≥650
Flexural strength, parallel, lbs. (4' direction)	80[3]	100[3]
Humidified deflection, inches	1/8"[3]	2/8"[3]
Permeance (perms)[1]	23	12
R value[2]	.56	.67
Linear variation with change in moisture in/in/%RH	6.25 x 10^{-6}	6.25 x 10^{-6}

Values are based on tests conducted in accordance with ASTM C 473 and ASTM E 72.

[1] Tested in accordance with ASTM C 355 (dry cup method).
[2] Tested in accordance with ASTM C 518 (heat flow meter).
[3] Minimum requirements for ASTM C 1177 standard specification.

G-P Gypsum
a Georgia-Pacific company

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: **1-800-876-4746** West: **1-800-824-7503**
South: **1-800-327-2344** Northeast: **1-800-947-4497**

CANADA Canada Toll Free: **1-800-387-6823**
Quebec Toll Free: **1-800-361-0486**

TECHNICAL INFORMATION
G-P Gypsum Technical Hotline
U.S.A. and Canada: **1-800-225-6119**
Mon.-Fri., 8 a.m.-6 p.m. ET
www.gpgypsum.com

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website for updates and current information.

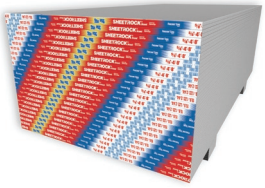
LIMITATION OF REMEDIES AND DAMAGES Our sole liability for any product claim shall be limited to reimbursement of the cost of repair or replacement of the affected product, up to a maximum amount of two times the original purchase price for the affected product. We shall not be responsible under any circumstances for lost profits, damage to a structure or its contents, or indirect, incidental, special or consequential damages. Claims shall be deemed waived if they are not submitted to us in writing within ten days after discovery.

SAFETY CAUTION: This product contains fiberglass. Fibers and dust may be released from this product during normal handling and may result in skin, eye and respiratory irritation. Avoid breathing dust and contact with the skin and eyes.

Follow these standard work practices: Wear a loose-fitting, long-sleeved shirt and long pants, protective gloves and eye protection (goggles or safety glasses with side shields). Wear a dust mask when sanding. Additional protection may be needed when very dusty. Do not use a power saw. For Material Safety Data Sheet, call 1-800-225-6119 or visit our website.

Submittal Sheet
09250

Sheetrock® Gypsum Panels



Regular and Firecode® Cores

Quality interior wall and ceiling panels at low cost
- Fire-resistant dry construction
- Quick installation and decoration
- Score and snap easily
- Resist cracking and warping
- Specialized types for all systems

Description

SHEETROCK® brand gypsum panels are factory-fabricated, composed of a fire-resistant gypsum core encased in heavy natural-finish face paper and strong liner paper on the back side. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. Long edges of panels are tapered, allowing joints to be reinforced and concealed with a USG joint treatment system.

SHEETROCK gypsum panels are available with three core types for standard construction uses.

Regular core

With a regular core, available in three thicknesses for specific purposes.

1/2″ Panels Recommended for single-layer application in residential construction.
3/8″ Panels Lightweight, applied principally in the double-wall system over wood framing, and in repair and remodeling.
1/4″ Panels Lightweight, low-cost, utility gypsum panels, used as base layer for improving sound control in double-layer steel and wood-stud partitions, and for use over old wall and ceiling surfaces. Also for forming curved surfaces with short radii.

FIRECODE® Core

5/8″ Type X Gypsum Panels Provide additional fire resistance over regular panels.

FIRECODE C Core

1/2″ and 5/8″ Type C Gypsum Panels Specially formulated mineral core provides fire resistance superior to that offered by FIRECODE Core gypsum panels.

Limitations

1. Avoid exposure to sustained temperatures exceeding 125 ˚F (52 ˚C).
2. Avoid exposure to excessive, repetitive or continuous moisture before, during and after installation. Eliminate sources of moisture immediately.
3. Non-loadbearing.
4. Fire-resistance ratings achieved when assembled in accordance with UL designs.

Finishing and Decorating

For high-quality finishing results, USG recommends the following products:
- SHEETROCK® ready-mixed joint compounds
- SHEETROCK® setting-type joint compounds
- SHEETROCK® joint tape
- SHEETROCK® First Coat primer
- SHEETROCK™ paper-faced metal bead and trim
- SHEETROCK® TUFF-HIDE™ primer-surfacer

Painting products and systems should be used which comply with recommendations and requirements in Appendixes of ASTM C840. For priming and decorating with paint, texture or wall covering, follow manufacturer's directions for materials used.

All surfaces, including applied joint compound, must be thoroughly dry, dust-free, and not glossy. Prime with SHEETROCK First Coat primer or with an undiluted, interior latex flat paint with high-solids content. Allow to dry before decorating.

To improve fastener concealment, where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting and be decorated with a gloss paint (egg shell, semi-gloss or gloss), the gypsum panel

surface should be skim coated with joint compound. This equalizes suction and texture differences between the drywall face paper and the finished joint compound before painting. As an alternative to skim coating, or when a Level 5 finish is required, use SHEETROCK TUFF HIDE™ primer-surfacer.

Product Data

Size: 1/4″, 3/8″, 1/2″ and 5/8″ x 48″ wide; 8′–14′ long. 1/2″ and 5/8″ also available in 54″ wide.

Weight: 1/4″ – 1.2 lbs/sf; 3/8″ – 1.4 lbs/sf; 1/2″ – 1.6 lbs/sf; 5/8″ – 2.2 lbs/sf.

Thermal Resistance "R": For 1/2″ thickness: 0.45 °F x ft.^{2} x h/Btu (0.08 K x m^2/W).

Thermal Coefficient of Expansion: Unrestrained: 40-100 °F (4-38 °C):
9.0 x 10^{-6} in./in./°F (16.2 x 10^{-6} mm/mm/°C) (16.2 µm/m/°C).

Hygrometric Coefficient of Expansion: Unrestrained: 5-90% r.h.
7.2 x 10^{-6} in./in./% r.h. (7.2 x 10^{-6} mm/mm/% r.h.) (7.2 µm/m/% r.h.).

Packaging: 2 panels per bundle.

Test Data

Surface Burning Characteristics: Flame spread 15, smoke developed 0.

Maximum Frame Spacing Drywall Construction

Direct Application	Panel thickness(1)		Location	Application method(2)	Max. frame spacing o.c.	
	in.	mm			in.	mm
Single-Layer	3/8	9.5	ceilings(3)	perpendicular(4)	16	406
				parallel(4)	16	406
	1/2	12.7	ceilings	perpendicular	24(5)(6)	610
				parallel(4)	16	406
			sidewalls	parallel or perpendicular	24	610
				parallel(4)	16	406
	5/8	15.9	ceilings(6)	perpendicular	24	610
			sidewalls	parallel or perpendicular	24	610
Double-Layer	3/8	9.5	ceilings(7)	perpendicular	16	406
			sidewalls	perpendicular or parallel	24(8)	610
	1/2 and 5/8	12.7 and 15.9	ceilings	perpendicular or parallel	24(8)	610
			sidewalls	perpendicular	24(8)	610

(1) 5/8″ thickness is recommended for the finest single-layer construction, providing increased resistance to fire and transmission of sound; 1/2″ for single-layer application in new residential construction and remodeling; and 3/8″ for repair and remodeling over existing surfaces. (2) Long edge position relative to framing. (3) Not recommended below unheated spaces. (4) Not recommended if water-based texturing material is to be applied. (5) Max. spacing 16″ if water-based texturing material is to be applied. (6) If 1/2″ SHEETROCK® interior ceiling board is used in place of gypsum panels, max. spacing is 24″ o.c. for perpendicular application with weight of unsupported insulation not exceeding 1.3 psf., 16″ o.c. with weight of unsupported insulation not exceeding 2.2 psf. (7) Adhesive must be used to laminate 3/8″ board for double-layer ceilings. (8) Max spacing 16″ o.c. if fire rating required.

Compliance

Meets ASTM C1396.

Submittal Approvals:

Job Name	
Contractor	Date

Trademarks
The following trademarks used herein are owned by United States Gypsum Company or a related company: DURABOND, EASY SAND, FIRECODE, SHEETROCK, TUFF HIDE.

Note
Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.

Notice
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!
Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

Manufactured by
United States Gypsum Company
550 West Adams Street
Chicago, IL 60661

800 USG.4YOU (874-4968)
usg.com

WB1473/rev. 1-07

GRABBER CONSTRUCTION PRODUCTS

A 100% Employee Owned Company

"The Professional's Choice"™

SUBMITTAL SHEET

Submittal Sheet #0309412

Fine Thread Bugle Head Streaker®

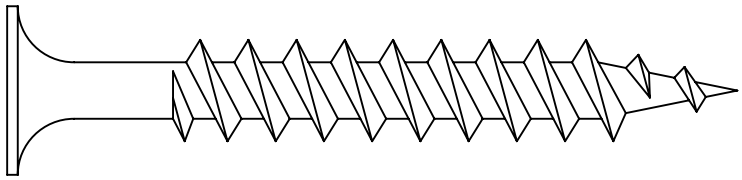
Product:	Item#	Description	Unit Pack
	168	Streaker Fine Thread 6X 1", Bugle Head, Bulk	10 M
	168A	Streaker Fine Thread 6X 1", Bugle Head, Bulk	10 M
	168HLA	Streaker Fine Thread 6X 1", Bugle Head, Hilo, Bulk	10 M
	268	Streaker Fine Thread 6X 1-1/8", Bugle Head, Bulk	10 M
	268A	Streaker Fine Thread 6X 1-1/8", Bugle Head, Bulk	10 M
	368	Streaker Fine Thread 6X 1-1/4", Bugle Head, Bulk	8 M
	368A	Streaker Fine Thread 6X 1-1/4", Bugle Head, Bulk	10 M
	368AZ	Streaker Fine Thread 6X 1-1/4", Bugle Head, Zinc, Bulk	10 M
	368HLA	Streaker Fine Thread 6X 1-1/4", Bugle Head, HiLo, Bulk	8 M
	468	Streaker Fine Thread 6X 1-5/8", Bugle Head, Bulk	5 M
	468A	Streaker Fine Thread 6X 1-5/8", Bugle Head, Bulk	5 M
	468HLA	Streaker Fine Thread 6X 1-5/8", Bugle Head, HiLo, Bulk	5 M
	768HLA6	Streaker Fine Thread 6X 2", Bugle Head, HiLo, Bulk	3.5 M
	868A6	Streaker Fine Thread 6X 2 1/4", Bugle Head, Bulk	3 M
	768	Streaker Fine Thread 6X 2", Bugle Head, Bulk	3.5 M
	768A7	Streaker Fine Thread 7X 2", Bugle Head, Bulk	3.5 M
	868	Streaker Fine Thread 7X 2-1/4", Bugle Head, Bulk	3 M
	968	Streaker Fine Thread 8X 2-1/2", Bugle Head, Bulk	2.5 M
	968A8	Streaker Fine Thread 8X 2 1/2", Bugle Head, Bulk	2.5 M
	1168	Streaker Fine Thread 8X 3", Bugle Head, Bulk	2 M
	1168A	Streaker Fine Thread 8X 3", Bugle Head, Bulk	2 M
	1268	Streaker Fine Thread 10X 3-1/2", Bugle Head, Bulk	1 M
	1368	Streaker Fine Thread 10X 4", Bugle Head, Bulk	1 M
	1468	Streaker Fine Thread 10X 4-1/2", Bugle Head, Bulk	1 M
	1568	Streaker Fine Thread 10X 5", Bugle Head, Bulk	1 M
	1768	Streaker Fine Thread 10X 6", Bugle Head, Bulk	1 M

Application: Designed specifically for attaching drywall to wood or light gauge metal (20 - 25 gauge). Scavenger head screws are designed to reduce paper burs in drywall attachment.

Description: Bugle Head, #2 Phillips Recess Drive, 15 TPI, Black Phosphorus Finish with 23¼ single lead, extra sharp Streaker point. "S" following the item # notes Scavenger™ head that eliminates drywall paper burrs. Available in GrabberGard® Exterior finish and clear zinc silver finish. Meets ASTM 1002, ICBO 5280, and ISO 2002 certifications and standards

Directions: Use standard screw gun with depth sensitive nose piece. Suggested screw gun for optimium performance is 4 amps minimum and 0 to 4,000 rpm. Bugle Head is completely seated when the head is flush with the work surface. Overdriving may result in failure of the fastener, the metal the fastener is attaching to or stripping of the head recess. Penetration of three thread pitches beyond the penentrated metal is minimum.

Bugle head Streaker



SUBMITTAL APPROVALS:

JOB NAME

CONTRACTOR	DATE

TRADEMARKS:

The following trademark used herein is owned by Grabber Construction Products, Inc.: GRABBER, SCAVENGER, STREAKER.

NOTICE:

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be (30) days of the date it was or reasonably should have been discovered.

Submittal Sheet #0309412

Product #212

Fine Thread Bugle Head Streaker®

Bugle Head

23° Streaker® Point

#2 Phillips Drive

SPECIFICATIONS

- Gauge – #6
- Lengths – 1″ to 1-5/8″
- Head Type – Bugle
- Recess Type – #2 Phillips
- Thread Type – Double Lead
- Finish – Gray Phosphate
- GRABBER® screws are manufactured in an ISO 9002 and ISO 14001 certified and approved factory, and are approved by ICCFS ES ER #5280.

PRODUCT FEATURES

- Unique head configuration helps eliminate paper burrs and aids proper seating of fasteners A fine thread screw for general interior applications 15 threads per inch.
- Super sharp, 23° STREAKER® point, designed to penetrate steel quickly and easily
- #2 Phillips recess drive

INSTALLATION GUIDELINES

- Use a standard screwgun with a depth-sensitive nose piece. Suggested screwgun specification for optimal performance – 4 amps minimum and RPM range of 0 to 4,000.
- The head is fully seated when the head is flush with the work surface.
- Overdriving may result in failure of fastener or strip out of the work surface.
- The fastener must penetrate beyond the metal three full thread pitches.

STANDARD CORROSION TEST RESULTS

Finish	Test	Standard/Protocol	Results
Black/Gray Phosphate	Salt Spray Results	ASTM B117	24 hours, No Red Rust

All GRABBER® screw products are manufactured in facilities that are ISO 9002 and ISO 14001 certified and approved. The fasteners comply with ASTM C1002, as referenced in ICCES report ER-5280 are approved for use in structures governed by the International Building Code 2006, 2009, 2012, International Residential Building Code 2006, 2009, and 2012.

ICC ES ICC EVALUATION SERVICE

GREEN DOVE AWARD ISO 14001 SGS

ISO 9001 CERTIFIED

ASTM INTERNATIONAL Standards Worldwide

GRABBER CONSTRUCTION PRODUCTS

A 100% Employee Owned Company

"The Professional's Choice"™

SUBMITTAL SHEET

Submittal Sheet #03090413

GRABBER® Pan Head Streaker®

Product:	Item#	Description	Unit Pack
	23	Pan Head STREAKER 7 x 7/16", Bulk (15TPI)	15 M
	23A	Pan Head STREAKER 7 x 7/16", Bulk (15TPI) (Made in USA)	15 M
	23F	Pan Head STREAKER 7 x 7/16", Bulk (20 TPI)	15 M

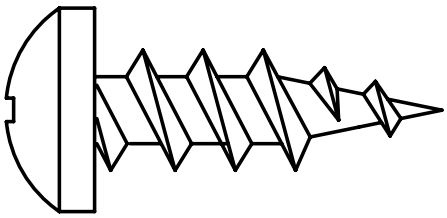
Grabber American Made Screws with the item numbers ending in "A" are manufactured by Brynolf Manufacturing, Rockford, Illinios. Grabber Construction Products is the exclusive distributor of Grabber American Made Screws Grabber American Made Screws have a unique identification head stamp mark "*". Grabber American Made Screws are SPECIAL ORDER INVENTORY. CONTACT GRABBER FOR CURRENT PRICE AND AVAILABILITY.

Application: Designed specifically for framing light gauge metal to light gauge metal stud. (20 - 25 gauge) Also used for strapping, HVAC assembly applications.

Description: GRABBER Pan Head Streaker Screws are designed for use with light gauge steel (20-25 gauge) Choice of 15 or 20 Threads per Inch. Grey phosphate, clear zinc or GrabberGard® coatings. HiTorque head design.

Directions: Use standard screw gun with depth sensitive nose piece. Suggested screw gun for optimium performance is 4 amps minimum and 0 to 4,000 rpm. Pan Head is completely seated when the head is against the work surface. Overdriving may result in failure of the fastener, the metal the fastener is attaching to or stripping of the head recess. Penetration of three thread pitches beyond the penentrated metal is minimum.

Pan head streaker



SUBMITTAL APPROVALS:

JOB NAME

CONTRACTOR	DATE

TRADEMARKS:

The following trademark used herein is owned by Grabber Construction Products, Inc.: GRABBER, STREAKER.

NOTICE:

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be (30) days of the date it was or reasonably should have been discovered.

Product #216

Pan Framing Head STREAKER®

Pan Head

23° Streaker® Point

#2 Phillips Drive

PRODUCT FEATURES

Used in light gauge metal to metal applications where high torque is required. Super sharp 30° Streaker Point means quick and easy penetration.

- A fine thread screw for metal-to-metal framing applications
- 15 or 20 threads per inch
- High torque Pan Framing Head
- Super sharp, 23° STREAKER® point, designed to penetrate steel quickly and easily
- #2 Phillips recess drive

SPECIFICATIONS

- Gauge – #7
- Length – 7/16"
- Head Type – Pan Framing
- Recess Type – #2 Phillips
- Thread Type – Double Lead
- Finish – Gray Phosphate
- GRABBER® screws are manufactured in an ISO 9002 and ISO 14001 certified and approved factory, and are approved by ICC ER #5280.

STANDARD CORROSION TEST RESULTS

Finish	Test	Standard/Protocol	Results
Black/Gray Phosphate	Salt Spray Results	ASTM B117	24 hours, No Red Rust

All GRABBER® screw products are manufactured in facilities that are ISO 9002 and ISO 14001 certified and approved. The fasteners comply with ASTM C1513, as referenced in ICC ESR report ESR-1271, are approved for use in structures governed by the International Building Code 2006, 2009, 2012, International Residential Building Code 2006, 2009, and 2012.

ICC EVALUATION SERVICE

ISO 14001 SGS

ISO 9001 CERTIFIED

ASTM INTERNATIONAL Standards Worldwide

Submittal Sheet
09250

Sheetrock®
All Purpose Joint Compound

A complete conventional weight all purpose joint compound providing professional-grade performance

- Smoother working
- Excellent bond
- Good open time
- Excellent for embedding tape
- For use with SHEETROCK® brand MOLD TOUGH™ gypsum panels to achieve a mold resistant system

Description

This all purpose joint compound provides overall high performance, as well as superior working qualities and good open time. It offers excellent bond over bead, trim and fastener concealments. This special latex formulation is ideal for embedding paper tape and for filling, leveling and finishing over gypsum panel joints, fasteners, bead and trim. SHEETROCK brand conventional weight all purpose joint compound is also excellent for skim coating and hand-applying simple textures. Recommended for use with MOLD TOUGH gypsum panels to achieve a complete mold resistant wall system. Complies with ASTM C475.

Limitations

1. Protect container from freezing and extreme heat.
2. Prior to using any epoxy coating over any surface treated with joint compound, consult the epoxy coating manufacturer and follow manufacturer's specific recommendations regarding the preparation or suitability of substrates for the epoxy coating. Many epoxy coatings exert significant shear stress on the substrate as the strong epoxy film shrinks while curing/drying. This stress can cause the bond of the joint compound to fail, resulting in delamination problems.

Preparation

Position and apply SHEETROCK® brand gypsum panels in accordance with manufacturer's recommendations.

In cold weather and during gypsum panel joint finishing, temperatures within the building shall be maintained at a minimum of 55° F (13° C). Adequate ventilation shall be provided to carry off excess moisture.

Mix contents lightly without adding water. Use directly from container for covering fasteners and corner bead. For taping and finishing joints (especially for use in mechanical tools), thin as necessary. Add water in half-pint increments to avoid overthinning. Remix lightly and test apply after each water addition.

Application

Cover joint with a thin layer of compound and embed paper tape, leaving about 1/32" of compound under feathered edge. Let dry and sand lightly. Apply second coat, feathering approximately 2" beyond first coat. Let dry, sand lightly as required, and then apply third coat, feathering 2" beyond second coat. Sand lightly as required when dry. Finish fastener heads, corner bead and inside corners as required with at least three coats of joint compound, feathered out onto panel faces and finished to a smooth surface.

Decorating

For priming and decorating with paint, texture or wallcovering, follow manufacturer's directions for materials used. All surfaces, including applied joint compound, must be thoroughly dry, dust-free and not glossy before decorating. A prime coat of SHEETROCK® brand First Coat™ primer or a good quality interior latex flat wall paint with a high solids content should be applied undiluted and allowed to dry before decoration. Walls to be covered with wallpaper or vinyl wallcovering should be sealed per manufacturer's recommendation.

To improve fastener concealment, where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting and be decorated with a gloss paint (eggshell, semigloss or gloss), the gypsum panel surface should be skim coated with SHEETROCK brand conventional weight all purpose joint compound to equalize suction before priming and painting, or spray wall with SHEETROCK® brand TUFF-HIDE™ primer-surfacer.

USG

Product Data

Material: Latex-type formulation.
Types: Hand or mechanical application.
Freezing Sensitivity: Protect from freezing.
Coverage: Approximately 125 lb. to 150 lb./1,000 sq. ft. (61.0 to 73.2 kg/100 sq. m) of gypsum panels.
Compliance with Standards: Meets ASTM Standard C475.
Storage: Shelf life up to 9 months under storage conditions. Store compound in protected place, because extreme heat or cold accelerates aging. Check production date codes periodically. Rotate stock on first-in, first-out basis.
Packaging: 48-lb., 50-lb. and 61.7-lb. (28 kg) pails and cartons. Cartons and pails will vary by geographic region.
Cleanup and Storage: Wash tools with warm, soapy water. Wipe tools dry to prevent rusting. Keep container tightly sealed. Store in a dry location at room temperature. Protect from freezing, exposure to extreme heat and direct sunlight.

Submittal Approvals:

Job Name	
Contractor	**Date**

WARNING:
Dust generated from sanding product may cause eye, skin, nose, throat or respiratory irritation. Use wet-sanding to avoid creating dust. Avoid inhalation of dust and eye contact. If dusty, wear a NIOSH/MSHA-approved respirator. Prolonged and repeated exposure to respirable mica may cause lung disease. Wear eye protection. Provide good general ventilation and local exhaust ventilation to avoid excessive amounts of dust. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician. Product safety information: (800) 507-8899
Keep out of reach of children.

Note:
Products described here may not be available in all geographic markets. Consult your United States Gypsum Company sales office or representative for information.

SAFETY FIRST!
Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

Manufactured by
United States Gypsum Company
550 West Adams Street
Chicago, IL 60661

usg.com

J1969/rev. 8-11

Submittal Sheet

SHEETROCK® Fiberglass Drywall Tape

Unique cross-fiber construction provides greater drywall joint strength and crack resistance

- Self-adhesive tape goes on quickly—eliminates bedding coat and provides smooth finished joints with just two coats.
- Use SHEETROCK® Brand DURABOND® Setting-Type Joint Compound or SHEETROCK® Brand EASY SAND™ Lightweight Setting-Type Joint Compound for first coat over tape.
- Provides 2-coat, 1-day joint finishing.

Description

SHEETROCK® Brand Fiberglass Drywall Tape is made with a unique cross-fiberglass construction to provide greater drywall joint strength than conventional fiberglass mesh tapes. SHEETROCK Fiberglass Drywall Tape resists shrinking, tearing, stretching and distortion. It also resists joint cracking that can occur when conventional fiberglass mesh tape is used. In reinforcing joints and corners in drywall interiors, setting-type joint compounds (not ready-mixed or powder drying-type joint compounds) are recommended for the first coat over SHEETROCK Fiberglass Drywall Tape. For the second coat, setting-type or drying-type (ready-mixed or powder) joint compounds may be used. SHEETROCK Fiberglass Drywall Tape is recommended for use with either setting-type or drying-type joint compounds to repair small cracks and holes in drywall and plaster surfaces.

Advantages

Unique construction Conventional fiberglass mesh tapes can stretch slightly when the joint is deflected. When stretching occurs, joints can crack. For this reason, conventional fiberglass tape is recommended only with special high-strength setting-type powder compounds such as SHEETROCK® Brand MH TUF-SET™ Setting-Type Joint Compound. In contrast, the unique leno weave construction of SHEETROCK Fiberglass Drywall Tape resists stretching to prevent cracking in drywall joints. Because it achieves greater joint strength than conventional fiberglass tapes, SHEETROCK Fiberglass Drywall Tape can be used with products such as DURABOND® Setting-Type or EASY SAND™ Lightweight Setting-Type joint compounds for the first coat, and either a setting-type or drying-type (powder or ready-mixed) joint compound for the second coat.

Fewer coats of joint compound SHEETROCK Fiberglass Drywall Tape is self-adhesive, eliminating the embedding or taping coat required with conventional paper tape.

Simpler, quicker joint finishing With DURABOND Setting-Type or EASY SAND Lightweight Setting-Type joint compounds, joint finishing can be completed in just one day.

Ideal for patching Use SHEETROCK Fiberglass Drywall Tape to easily patch small holes and cracks in drywall and plaster walls and ceilings.

Application

Joint Treatment

Maintain minimum air, joint comound, tape, and surface temperature of 55 °F (13 °C) within working area until joints are completely dry. Provide adequate ventilation to carry off excess moisture. Be sure drywall surface is dry and clean.

Center and apply SHEETROCK Fiberglass Drywall Tape directly over joint, pressing tape firmly so it adheres evenly. Cut tape with drywall knife. To eliminate wrinkles and ensure maximum bond, press entire length of tape with drywall knife. Avoid overlapping tape at intersections. Cover with a layer of setting-type joint compound, forcing compound through the tape with a drywall knife/trowel to completely fill and level the joint. Failure to completely fill the joint may result in cracking. Let dry and sand lightly as required. Apply second coat of setting-type or drying-type (powder or ready-mixed) joint compound, feathering approximately two inches beyond first coat. Let dry and sand lightly as required.

To finish inside corners, bend the tape with your fingers to form a U. Apply tape along one side only. Press it into the corner for approximately 12 inches and then apply the other side. Work down the corner in this manner until tape is pressed firmly in place. Apply setting-type joint compound down the entire length of one side of the corner, then repeat on the other side. Force the compound through the tape, being careful not to cut the tape with drywall knife during the compound application. Let dry and sand lightly as required.

Apply second coat of setting-type or drying-type (powder or ready-mixed) compound, feathering approximately two inches beyond first coat. Let dry and sand lightly as required. Finish fastener heads, corner bead and trim with at least three coats of joint compound, (only two coats if using SHEETROCK® Brand Lightweight All Purpose Joint Compound, DURABOND Setting-Type Joint Compound or EASY SAND Lightweight Setting-Type Joint Compound) feathered out onto panel faces and sanded as required to a smooth surface.

USG

	Finishing	For painting and decorating, follow manufacturers' directions for materials used. All surfaces, including joint compound, must be thoroughly dry, dust-free and not glossy before decorating. A prime coat of SHEETROCK® Brand First Coat or a quality interior latex flat wall paint with high solids content should be applied undiluted and allowed to dry before painting, texturing or wallpapering. Where walls and ceilings will be subject to severe artificial or natural side lighting and/or decorated with gloss paint (eggshell, semi-gloss, or high-gloss), skim-coat gypsum panels with SHEETROCK Brand All Purpose Joint Compound or COVER COAT® Compound to improve fastener concealment and minimize decorating problems such as joint banding. Skim coating fills imperfections in joint work, smoothes the paper covering of drywall panels and provides a uniform surface for priming and painting.
Product Data		**Width:** 1-7⁄8″ (47 mm) and 2-1⁄2″ (63.5 mm). **Coverage:** Approximately 370 ft/1000 ft^2 (121.4 m/100 m^2) gypsum panels. **Packaging:** The 75-ft roll (17⁄8″ width only) is ideal for the occasional small drywall job, patching work, etc. The 250-ft roll is a popular size for hand-application joint treatment. Master cartons contain 24 ea. 75-ft rolls per carton, 20 ea. 250-ft rolls. **Storage:** Shelf life up to nine months under good storage conditions. Store at a minimum temperature of 45 °F. (7 °C).
Submittal Approvals:	**Job Name**	
	Contractor	**Date**

Note
All products described here may not be available in all geographic markets. Consult your local U.S. Gypsum sales office or representative for information.

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SAFETY FIRST!
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J780A/rev. 12-04

USG Interior Panel & Finishing Solutions

USG SHEETROCK® BRAND GYPSUM PANELS MOLD TOUGH® VHI FIRECODE® CORE

VERY HIGH IMPACT

Low-cost, high-impact-resistant panels with moisture and mold resistance

- An upgrade to abuse-resistant panels
- Superior impact resistance
- Meets ASTM C1629 Level 3 (highest) for hard- and soft-body impact
- Can be used for a tile substrate in dry locations or areas with limited water exposure

DESCRIPTION

USG Sheetrock® Brand Mold Tough® VHI (Very High Impact) Firecode® Core gypsum panels are designed and tested to offer greater surface and superior impact damage resistance than standard gypsum wallboard. These abuse-resistant panels are a lower-cost alternative to other systems used in partitions that require improved impact resistance.

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels have a noncombustible, moisture-resistant core encased in moisture- and mold-resistant, 100 percent recycled green-face and brown-back papers. The face paper is folded around the long edges to reinforce and protect the core, and the ends are cut square and finished smooth. Through a proprietary process, a fiberglass reinforcing mesh is imbedded in the core adjacent to the back paper. This mesh strengthens the panels and increases resistance against impact damage. Long edges of panels are tapered, allowing joints to be reinforced and concealed with a USG joint treatment system.

Recommended for commercial and institutional construction where superior impact damage resistance is required, while providing a lower-cost alternative to other construction methods. This panel is classified by UL as to fire resistance and meets the requirement for Type X in the model building code.

LIMITATIONS

1. Do not expose to sustained temperatures exceeding 125°F (52°C).
2. Maximum framing spacing is 16″ o.c.
3. Do not expose to excessive, repetitive or continuous moisture before, during or after installation. Eliminate sources of moisture immediately.
4. Not suitable for use in high-moisture areas such as tub and shower enclosures, gang showers and other areas subject to direct water exposure.
5. Non-load-bearing.
6. For abuse-resistant construction over steel framing, minimum 20-gauge drywall steel studs (0.0312″ design thickness) as defined by the Steel Stud Manufacturers Association (SSMA) are required.
7. Application of USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels over insulating blanket, installed continuously across the framing members is not recommended. Blankets should be recessed and blanket flanges attached to sides of studs or joists.
8. Use as a tile substrate is limited to tile installed according to the most current TCNA and ANSI specifications. Please consult with the adhesive and tile manufacturers for their recommendations for maximum size and weight parameters for use with gypsum board.

INSTALLATION

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels are by design stronger and have greater surface hardness than standard 5/8″ Type X panels. Because of this, they are heavier and will be expectedly more difficult to install. Slower installation production rates should be accounted for in job planning. Installing USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels on studs fabricated with steel thinner than true 20-gauge drywall steel studs (0.0312″ design thickness) as defined by the SSMA may result in increased fastener strip-out, improper screwhead seating, or other related conditions. The equivalent gauge framing is also more sensitive to screw configuration and thread pitch. Due to the wide variety of "equivalent" or "effective" gauge studs and the variation by manufacturer in actual steel thickness, USG has no specific recommendations for installing USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels on equivalent gauge steel studs.

FINISHING AND DECORATING

For high-quality finishing results, USG recommends the following products:

- USG Sheetrock® Brand Ready-Mixed Joint Compounds
- USG Sheetrock® Brand First Coat Primer
- USG Sheetrock® Brand Setting-Type Joint Compounds
- USG Sheetrock® Brand Paper-Faced Metal Drywall Bead and Trim
- USG Sheetrock® Brand Joint Tape
- USG Sheetrock® Brand Tuff-Hide™ Primer-Surfacer

Painting products and systems should be used that comply with recommendations and requirements in appendices of ASTM C840. For priming and decorating with paint, texture or wall covering, follow manufacturer's directions for materials used.

All surfaces, including applied joint compound, must be thoroughly dry, dust-free and not glossy. Prime with USG Sheetrock® Brand First Coat Primer or with an undiluted, interior latex flat paint with high-solids content. Allow to dry before decorating.

To improve fastener concealment where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting and be decorated with a gloss paint (eggshell, semigloss or gloss), the gypsum panel surface should be skim-coated with joint compound. This equalizes suction and texture differences between the drywall face paper and the finished joint compound before painting. As an alternative to skim coating, or when a Level 5 finish is required, use USG Sheetrock® Brand Tuff-Hide Primer-Surfacer.

PRODUCT DATA

Size: Panels are 5/8″ (15.9 mm) thick x 4′ (1218 mm) wide and available in 8′-12′ (2438-4267 mm) lengths

Weight: 5/8″ – 2.8 lbs/sf

TEST DATA

Moisture and Mold Resistance
Per ASTM C473, the average water absorption for panels is not greater than 5 percent by weight after two-hour immersion.

In independent lab tests conducted on 5/8″ USG Sheetrock® Brand Mold Tough VHI Firecode Core panels at the time of manufacture per ASTM D3273, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber," the panel score was 10.

This ASTM lab test may not accurately represent the mold performance of building materials in actual use. Given unsuitable project conditions during storage, installation or after completion, any building material can be overwhelmed by mold. To manage the growth of mold, the best and most cost-effective strategy is to protect building products from water exposure during storage and installation and after completion of the building. This can be accomplished by using good design and construction practices. For more information, please see the USG data sheet WB2325 "System Solutions to Prevent Mold," and the Responsible Solutions to Mold Coalition website, responsiblemoldsolutions.org.

ABUSE RESISTANCE

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels are tested in accordance with ASTM C1629 and are third-party evaluated.

Test Standard	Test Summary	Classification Levels	Test Results
Abrasion Resistance ASTM C1629	A sample is placed under a wire brush weighted with 25 lbs. The brush is then cycled 50 times back and forth across the surface. This creates surface wear that is measured to determine the level of abrasion resistance.	Maximum Depth Level 1 = 0.126″ Level 2 = 0.059″ Level 3 = 0.010″	Level 2
Indentation Resistance ASTM C1629	A 2 lb. weight is raised to a 36″ height and dropped onto a 5/8″ hemispherical die that strikes the sample with 72″ lbs. of force. The depth of the indentation is measured to determine the level of indentation resistance.	Maximum Depth Level 1 = 0.150″ Level 2 = 0.100″ Level 3 = 0.050″	Level 1
Soft-Body Impact Resistance ASTM C1629	A 60 lb. leather bag is suspended on a rope and raised away angularly from a sample installed on 2″ x 4″ wood framing 16″ o.c. The bag is raised (in 6″ increments) and released to impact the sample. The impact energy is calculated based upon the bag weight and drop height where structural failure occurs.	Minimum ft.-lb. (structural failure) Level 1 = 90 ft.-lb. Level 2 = 195 ft.-lb. Level 3 = 300 ft.-lb.	Level 3
Hard-Body Impact Resistance ASTM C1629	A 2′ x 2′ sample is mounted vertically to a metal frame and impacted with a 2-3/4″ diameter weighted swinging ram (resembling a sledgehammer). Weight is added in 2.5 lb. increments to increase the impact force. Failure energy is determined when penetration through the face into the frame cavity occurs.	Minimum ft.-lb. (structural failure) Level 1 = 50 ft.-lb. Level 2 = 100 ft.-lb. Level 3 = 150 ft.-lb.	Level 3

Note: USG testing demonstrates that when painted with one coat of primer and two coats of semigloss latex paint, the abrasion resistance for paper-faced gypsum wallboard panels increases to Level 3.

COMPLIANCE

Each 5/8″ USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panel bears the Underwriters Laboratories, Inc. mark as evidence of UL Classifications for fire resistance, surface-burning characteristics and noncombustibility. They can be used in UL designs where type “AR” panels are listed. Class A, as defined in IBC section 803.1, flame spread is 15, smoke developed is 5, when tested in accordance with ASTM E84. The gypsum core meets code requirements for noncombustible construction. Complies with ASTM C1396.

SUBMITTAL APPROVALS

Job Name	
Contractor	**Date**

PRODUCT INFORMATION
See usg.com for the most up-to-date product information.

WARNING
Dust can contain silica. Prolonged and repeated breathing of silica dust can cause lung damage and cancer. If cutting with a power tool, use a wet or vacuum saw to reduce the amount of dust generated. Dust can be corrosive to eyes, skin and respiratory tract. Contact can cause severe chemical burns. Wear eye, skin and respiratory protection. If eye contact occurs, flush immediately with water for 30 minutes. If ingested, call a physician. Product safety information: 800 507-8899 or usg.com Customer Service: 800 USG.4YOU (874-4968).
KEEP OUT OF REACH OF CHILDREN.

NOTE
Products described here may not be available in all geographic markets. Consult your USG Company sales office or representative for information.

NOTICE
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!
Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

800 USG.4YOU
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Manufactured by
United States Gypsum Company
550 West Adams Street
Chicago, IL 60661

WB2529/rev. 11-14

USG
IT’S YOUR WORLD. BUILD IT.™

Submittal Sheet
09800

SHEETROCK® Joint Tape–Heavy

For exceptional strength and crack-resistance in drywall joint treatment

- Meets ASTM C475.
- High tensile strength to resist tearing, stretching, and distortion.
- Roughened surface for superior bond.
- Accurately center-creased to improve corner treatment.

Description

SHEETROCK® Joint Tape-Heavy is a special fiber tape designed for use with U. S. Gypsum Joint Compounds in reinforcing joints and corners in gypsum drywall interiors. Meets ASTM C475. Also recommended for joint treatment in veneer finish systems subject to rapid drying conditions and where framing exceeds 16 in. (406 mm) spacing. It is lightly sanded for increased bond and comes with a positive crease to simplify application in corners.

Advantages

Extra strength for strong joints. SHEETROCK Joint Tape-Heavy is manufactured from special cross-fibered paper with high tensile strength, both with and across the paper grain. Average cross-tensile strength produces joints as strong as the board itself. SHEETROCK Joint Tape-Heavy also possesses exceptional wet strength—resists stretching, wrinkling, and other distortions; lies flat and resists tearing under tools.

Easier to apply. Precision processing produces a superior bond to joint compound, with positive center creasing and uniform winding for accurate and trouble-free application to angles as well as flat joints.

Resists cracking, stretching. SHEETROCK Joint Tape-Heavy is outstanding in all other characteristics. Moisture content is controlled.

Note: For additional information on related products and assemblies using SHEETROCK Joint tape, see other U. S. Gypsum data sheets in this series and Architectural Technical Folders SA923, SA924, and SA927.

Environmental Conditions

In cold weather and during gypsum panel application and joint finishing, temperatures within the building shall be maintained within the range of 55 °-70 °F (13-21 °C). Adequate ventilation shall be provided to carry off excess moisture.

Application

Position and apply SHEETROCK® brand Gypsum Panels in accordance with manufacturer's recommendations. Prepare joint compound following directions on container. Cover joint with a thin layer of compound and embed tape, leaving about 1/32 in. (0.7 mm) of compound under feathered edge. While embedding the tape, remove excess compound from edge and apply as a thin coat over the tape. Let dry and sand lightly as required. Apply second coat, feathering approx. 2 in. (50 mm) beyond first coat. Let dry, sand lightly as required, and then apply third coat, feathering 2 in. (50 mm) beyond second coat. Sand lightly as required when dry. Finish fastener heads, corner bead, and inside corners as required with at least three coats of joint compound, feathered out onto panel faces and sanded as required to a smooth surface.

For painting and decorating, follow manufacturer's directions for materials used. All surfaces, including applied joint compound, must be thoroughly dry, dust-free, and not glossy before decorating. A prime coat of SHEETROCK® First Coat or a good quality interior latex flat wall paint with high solids content should be applied undiluted and allowed to dry before painting, texturing, or wallpapering.

To improve fastener concealment where gypsum panel walls and ceiling will be subjected to severe artificial or natural side lighting, and be decorated with a water-based paint, apply a skim coat of SHEETROCK® Ready-Mixed Joint Compound-All Purpose; SHEETROCK® Ready-Mixed Lightweight All Purpose Joint Compound-PLUS 3; or COVER COAT® Compound (see J510) prior to decoration.

Product Data

Material: Cross-fibered paper.

Width: Nom. 2-1/16″ (52 mm).

Packaging:

250 ft. (76.2 m) Roll: Popular size for hand-application joint treatment.

500 ft. (152.4 m) Roll: Designed to fit easily into taping machines; avoids frequent roll changes.

Master Cartons: Contain 20 ea. 250 ft. (76.2 m) rolls, or 10 ea. 500 ft. (152.4 m) rolls.

Submittal Approvals:

Job Name

Contractor **Date**

Trademarks:
The following trademarks used herein are owned by United States Gypsum Company: COVER COAT, PLUS 3, SHEETROCK.

Note:
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http://www.usg.com

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Submittal

SHEETROCK® Brand Metal Bead and Trim

Superior protection and finishing for corners, angles and panel intersections.
— Available in a wide variety of styles, lengths and flange widths for flexible application
— Made of corrosion-resistant, all metal galvanized steel
— Ideal for both steel and wood-frame construction
— Provides excellent joint compound adhesion where required

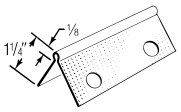
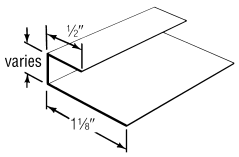
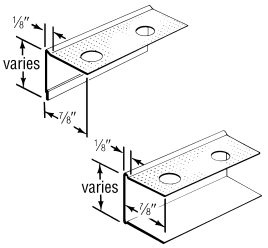
Description

SHEETROCK® Brand Metal Bead and Trim products are low cost, high performance accessories that simplify and enhance the finishing of gypsum panel assemblies. These accessories are designed to work together, adding value and lasting durability on outside corners, uncased openings, soffits, pilasters, beams and other impact- or stress-prone edges or areas.

Directions

Usage

A. DUR-A-BEAD® Metal Corner Bead is used to strengthen and protect external edges.
B. SHEETROCK® 200-A Metal Trim, 1/2″ and 5/8″, is ideal for edge protection and features a J-shaped channel.
C. SHEETROCK® 200-B Metal Trim, 1/2″ and 5/8″, is used for simplified edge protection and features an L-shaped channel without a back flange.
D. SHEETROCK® 401 Metal Trim, 1/2″, J-Stop, is used for reveal-type edge protection and requires no finishing compound.
E. SHEETROCK® 402 Metal Trim, 5/8″, J-Stop, is used for reveal-type edge protection and requires no finishing compound.

DURA-A-BEAD® Corner Bead	J-Stop	L-Trim and J-Trim
		

Application

DUR-A-BEAD Metal Corner Reinforcement—Use drywall nail or staples spaced 9″ o.c. in both flanges and placed opposite. Fasten to framing through board. May use "clinch-on" tool to attach. Use correct-size tool for flange width. Finish corner with three coats of joint compound; use only two coats with SHEETROCK® Brand lightweight compounds.

SHEETROCK 200-A and 200 B Metal Trim, 1/2″ and 5/8″—Apply gypsum panels, omitting fasteners at framing member where trim is to be installed. Leave a space 3/8″ to 1/2″ wide between edge of panel and face of jamb. Slip trim over edge of panel with wide knurled flange on room side and fasten trim and panel to framing using standard panel fasteners. Space fasteners 9″ o.c. maximum. Finish with three coats of joint compound; use only two coats with SHEETROCK Brand lightweight compounds.

SHEETROCK 401 Metal Trim, 1/2″, J-Stop, and SHEETROCK 402 Metal Trim, 5/8″, J-Stop—Apply trim to wall before gypsum panels go up by nailing through trim flange into framing. Space fasteners 9″ o.c. Board is held firmly in place by short leg of trim. No additional edge fastening is necessary.

Product Data

Design: SHEETROCK Brand Metal Bead and Trim products are designed to accommodate a broad range of applications and construction requirements. Design varies between styles. Most styles are available in standard lengths. Some styles are available with or without flanges or the need for joint compounds and fasteners. Quality, all-steel construction also gives each piece unmatched strength and rust-resistance.
Sizes: DUR-A-BEAD Metal Corner Bead is available in 8′, 9′, 10 and 12′ lengths.
SHEETROCK 200-A and 200-B Metal Trim, 1/2″ and 5/8″, are available in 8′ and 10′ lengths.
SHEETROCK 401 Metal Trim, 1/2″, J-Stop, and 402 Metal Trim, 5/8″, J-Stop, are available in 8′ and 10′ lengths.

Submittal Approvals:	Job Name	
	Contractor	Date

Trademarks:
The following trademarks used herein are owned by United States Gypsum or a related company: DUR-A-BEAD, SHEETROCK.

Note:
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Acoustical Hangers

NITROSET Pin & Clip Assembly

For wire suspension hanging acoustical ceiling systems or other overhead fixtures and applications such as hanging lights.

Not regulated as a class1explosive.

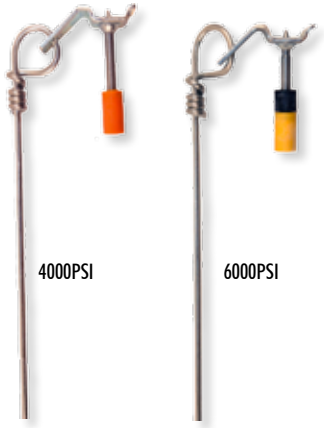
PART NO.	PKG QTY	DESCRIPTION
4000psi		
CLAS322L	100	7/8" X .145 STRAIGHT SHANK PIN & CLIP WITHOUT SILENCER
CLAS325L	100	1" X .145 STRAIGHT SHANK PIN & CLIP WITHOUT SILENCER
CLAS332L	100	1-1/4" X .145 STRAIGHT SHANK PIN & CLIP WITHOUT SILENCER
6000psi		
CLAS525LS	100	1" X .152 - .130 STEP SHANK PIN & CLIP WITH SILENCER
CLAS532LS	100	1-1/4" X .152 - .130 STEP SHANK PIN & CLIP WITH SILENCER

For wire suspension hanging acoustical ceiling systems or other overhead fixtures and applications such as hanging lights.

Not regulated as a class1explosive.

PART NO.	PKG QTY	DESCRIPTION
CLU222	100	7/8" X .145 ANGLE PIN & CLIP ASSEMBLY

NITROSET Pre-Tied Wire to Clips



4000PSI 6000PSI

Pre-tied Nitroset pins and clips.

Special ties and longer lengths available.

Not regulated as a class1explosive.

Custom pins and clip combinations are avilable upon request.

Check with your Grabber location to confirm size availability.

PART NO.	PKG QTY	DESCRIPTION
4000psi		
WIL12-4-332	100 (per bundle)	4' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-6-332	100 (per bundle)	6' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-8-332	100 (per bundle)	8' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-10-332	100 (per bundle)	10' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-12-332	100 (per bundle)	12' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-14-332	100 (per bundle)	14' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-16-332	100 (per bundle)	16' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-18-332	100 (per bundle)	18' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
WIL12-20-332	100 (per bundle)	20' PRE-TIED WITH 1-1/4" x 0.145 NITRO FASTENER WITHOUT SILENCER
6000psi		
WIL12-4-532LS	100 (per bundle)	4' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-6-532LS	100 (per bundle)	6' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-8-532LS	100 (per bundle)	8' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-10-532LS	100 (per bundle)	10' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-12-532LS	100 (per bundle)	12' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-14-532LS	100 (per bundle)	14' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-16-532LS	100 (per bundle)	16' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-18-532LS	100 (per bundle)	18' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER
WIL12-20-532LS	100 (per bundle)	20' PRE-TIED WITH 1-1/4" x 0.152 NITRO FASTENER WITH SILENCER

Straight Cut Wire

Straight cut 12ga. soft galvanized wire.

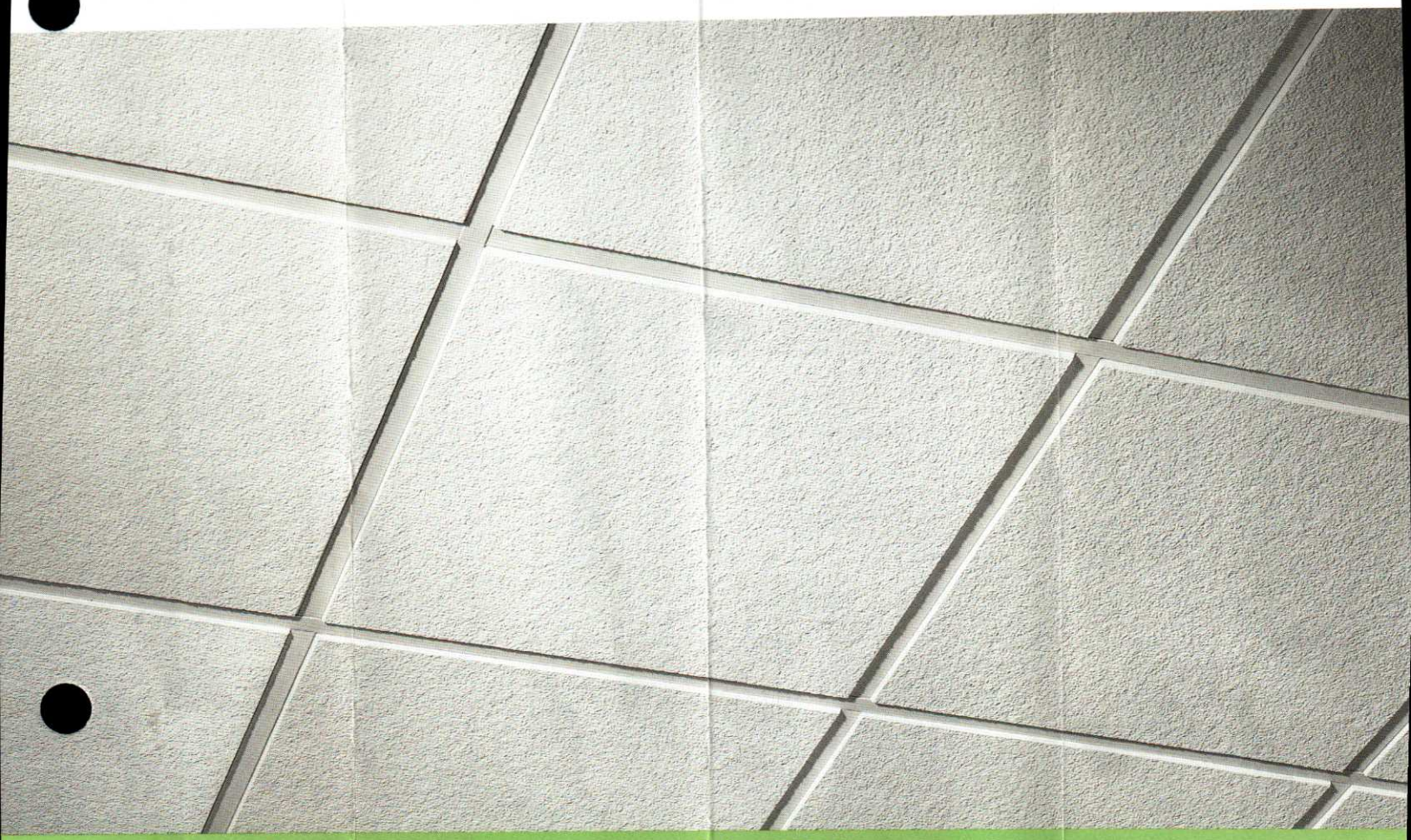
Check with your Grabber location to confirm length availability.

PART NO.	PKG QTY	DESCRIPTION
DHW1204	100 (per bundle)	4' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1205	100 (per bundle)	5' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1206	100 (per bundle)	6' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1207	100 (per bundle)	7' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1208	100 (per bundle)	8' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1210	100 (per bundle)	10' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1212	100 (per bundle)	12' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1214	100 (per bundle)	14' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1216	100 (per bundle)	16' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1218	100 (per bundle)	18 X 12 GAUGE HANGER WIRE STRAIGHT END CUT
DHW1220	100 (per bundle)	20' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
HW1222	100 (per bundle)	22' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
HW1224	100 (per bundle)	24' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
HW1226	100 (per bundle)	26' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
HW1228	100 (per bundle)	28' X 12 GAUGE HANGER WIRE STRAIGHT END CUT
HW1230	100 (per bundle)	30' X 12 GAUGE HANGER WIRE STRAIGHT END CUT

DX®/DXL™

10 Year Availability

HRC High Recycled Content



DONN DX/DXL Suspension System/
ECLIPSE Panels with *CLIMAPLUS* Performance

See LEED report tool at **usgdesignstudio.com** for detailed sustainability information.

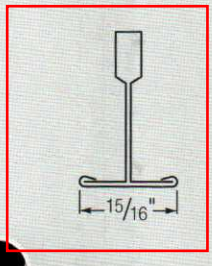
Features and Benefits

- 15/16" exposed tee system. Components for use in general and fire-rated applications.
- Maximum economy and design simplicity.
- Compatible with LOGIX™ Integrated Ceiling Systems.
- DXL™ system features more than 80 UL designs (up to three hours).
- Cross-tee override-ends resist twisting and give a professionally finished look.
- Meets or exceeds all national code requirements, including seismic.
- Proprietary QUICK-RELEASE™ cross tees.
- High recycled content (HRC) available.
- Custom color available.
- ICC-ES evaluated approach to seismic design installations (ICC-ESR-1222).

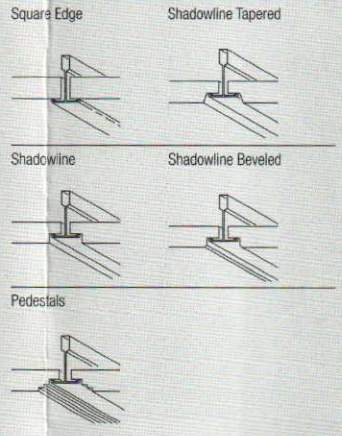
Applications

- Fire-rated, interior general use areas
- LOGIX Integrated Ceiling Systems

Profile



Edge Detail



To order samples, go to usg.com

Flat White 050

Standard Colors[4]

Parchment 103, Manila 246, Beige 142, Straw 143, Sandstone 090, Taupe 107, Charcoal 534, Flat Black 205, Silver Satin 002, Brass 065[13], Chrome 066[13]

Advantage Colors[4]

Silvertone 052, Breeze 2659, Blue Grey 564, Azure 2660, Slate 568, Spruce 567, Tuscany 2663, Sorbet 2658, Squash 2661, Safari 2662, Redwood 566, Sienna 565, Halo 206, Mist 053, Nectar 546, Quartz 082

DX®/DXL™

To order samples/literature:
Web: usg.com
E-mail: samplit@usg.com
Fax: 888 874.2348
Technical Services:
800 USG.4YOU (800 874.4968)

Websites:
usg.com
usgdesignstudio.com
For the most up-to-date technical information:
usgdesignstudio.com

System meets or exceeds load compliance specifications per ASTM C635

15/16" Tee System	Main Tee	ASTM Class	Length	Height	Item No.	Class	Color	Post Consumer RC	Total RC	Seismic Design Categors[1] IBC	Seismic Design Categors[1] ICC-ES Evaluated Installation	Rated Load[2] 4' Hanger Spacing	Rated Load[2] 5' Hanger Spacing	Rated Load[2] 6' Hanger Spacing[8]
		Intermediate Duty	12' 3600mm	1.64" 42mm	DX/[3,4,7,12] DXL24		Flat White Standard Advantage	up to 39%	up to 47%	A-C	7/8" Molding ACM7 Clip	12 lbs./LF	6.1 lbs./LF	3.6 lbs./LF
					DX/[3,4,12] DXL24HRC			57% HRC	65% HRC					
		Heavy Duty	12' 3600mm	1.64" 42mm	DX/[3,4,7,12] DXL26		Flat White Standard Advantage	up to 39%	up to 47%	A-F	7/8" Molding ACM7 Clip	16 lbs./LF	7.3 lbs./LF	4.9 lbs./LF
					DX/[3,4,12] DXL26HRC			57% HRC	65% HRC					
	Cross Tee 1"		2' 600mm	1" 25mm	DX/[3,4,7,12] DXL216		Flat White Standard Advantage	up to 25%	up to 33%					
					DX/[3,4,12] DXL216HRC			57% HRC	65% HRC					
	Cross Tee 1-1/2"		4' 1200mm	1-1/2" 38mm	DX/[3,4,7,12] DXL424		Flat White Standard Advantage	up to 20%	up to 47%					
					DX/[3,4,12] DXL424HRC			57% HRC	65% HRC					
					DX422[5,7,9]	Class A	Flat White Standard Advantage	up to 25%	up to 33%					
					DX422HRC[5]			57% HRC	65% HRC					
			5' 1500mm	1-1/2" 38mm	DX/[3,4,7,12] DXL524		Flat White Standard	up to 39%	up to 46%					

HRC **High Recycled Content**
Classified as containing greater than 50% total recycled content. Total recycled content is based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.

FIRECODE®

Molding[10]	Wall Angle	Length	Item No.	Color	Wall Angle	Length	Item No	Color	Post Consumer RC	Total RC
	2" 2"	10' 3000mm	M20SM-2 (up to 65% recycled content) HRC	Flat White	7/8" 7/8"	12' 3600mm	M7[8]	Flat White Standard Advantage	up to 65% HRC	
							M7HRC[8]		57% HRC	65% HRC
	Shadowline[11] 7/8" 9/32" 1 1/4" 3/4"	10' 3000mm	MS274[5] 2" shelf for seismic (Up to 65% recycled content) HRC	Flat White Custom	1" 2"	10' 3000mm	M20[5]	Flat White Custom	up to 65% HRC	
							M20HD Heavy Duty		up to 58% HRC	
							M20SM Seismic		up to 65% HRC	

Physical Data/ Footnotes

Product literature and samples
Data sheet: AC3167. Sample flat white – seismic: 271370. Sample flat white: 215673. Sample main tee: 206563. Sample flat black: 205100.

Material
Double-web G30 hot-dipped galvanized steel body and G30 hot-dipped galvanized steel cap.

Recycled content
For details, see LEED report tool at usgdesignstudio.com.

Installation
Must be installed in compliance with ASTM C636, ASTM E580, CISCA and standard industry practices, within all applicable code requirements. Alternative assemblies and installation methods may be utilized when approved by the Authority Having Jurisdiction. USG recommends checking with the Authority Having Jurisdiction prior to designing and installing a suspended ceiling system.

Limitations
Please refer to AX™ or ZXLA™ for exposed suspension systems in non-fire-rated, high humidity applications. Interior applications only. Please refer to SC2561 for more information about exterior ceiling applications.

ICC Evaluation Service, Inc., Report Compliance
Suspension systems manufactured by USG Interiors, LLC, have been reviewed and are approved by listing in ICC-ESR-1222. Evaluation Reports are subject to reexamination, revision and possible cancellation. Please refer to usgdesignstudio.com or 800 USG.4YOU (800 874.4968) for current reports.

L.A. Research Report Compliance
DONN® brand suspension systems manufactured by USG Interiors, LLC, have been reviewed and are approved by listing in the following L.A. Research Report number: 25764.

Code compliance
The information presented is correct to the best of our knowledge at the date of issuance. Because codes continue to evolve, check with a local official prior to designing and installing a ceiling system. Other restrictions and exemptions may apply.

The City of New York BSA and MEA Report Compliance
DONN suspension systems have been approved by listing in one or more of the following City of New York Board of Standards and Appeals, and Department of Building, Material and Equipment Acceptance reports: BSA 618-60-SM, BSA 184-77-SM, BSA 796-81-SM, MEA 366-93-M, MEA 133-95-M, MEA 312-99-M, MEA 123-00-M.

ASTM C635 Standard for Load Compliance
System meets or exceeds load compliance specifications per ASTM C635. Main tees will not deflect more than 1/8" over 48" span (or L/360) in Light Duty, Intermediate Duty or Heavy Duty categories.

Notes
1. All DX®/DXL™ main-tee and cross-tee connections meet IBC requirements for tension and compression strength.
2. Load test data shows uniform load in lbs./LF based on simple span tests in accordance with ASTM C635 deflection limit of L/360.
3. UL fire-rated listing, labeling and follow-up applies only to fire-rated components.
4. Color program for imperial only. Consult Customer Service for custom color and metric-tee colors.
5. Non-fire-rated only.
6. Cross-tee hole punch spacings also available for 20" and 30" modules.
7. Available in metric.
8. DX cross tees available in additional sizes and lengths.
9. Non-fire-rated applications may mix DX and DXL parts.
10. For moldings information, see Perimeter Interface selector.
11. Panels must be specified to be field-cut, field-revealed and to provide widest possible lay-on edge.
12. For DXL, channel moldings are also acceptable in some designs. Check UL Fire Resistance Directory for molding options.
13. Brass and chrome available on limited items.

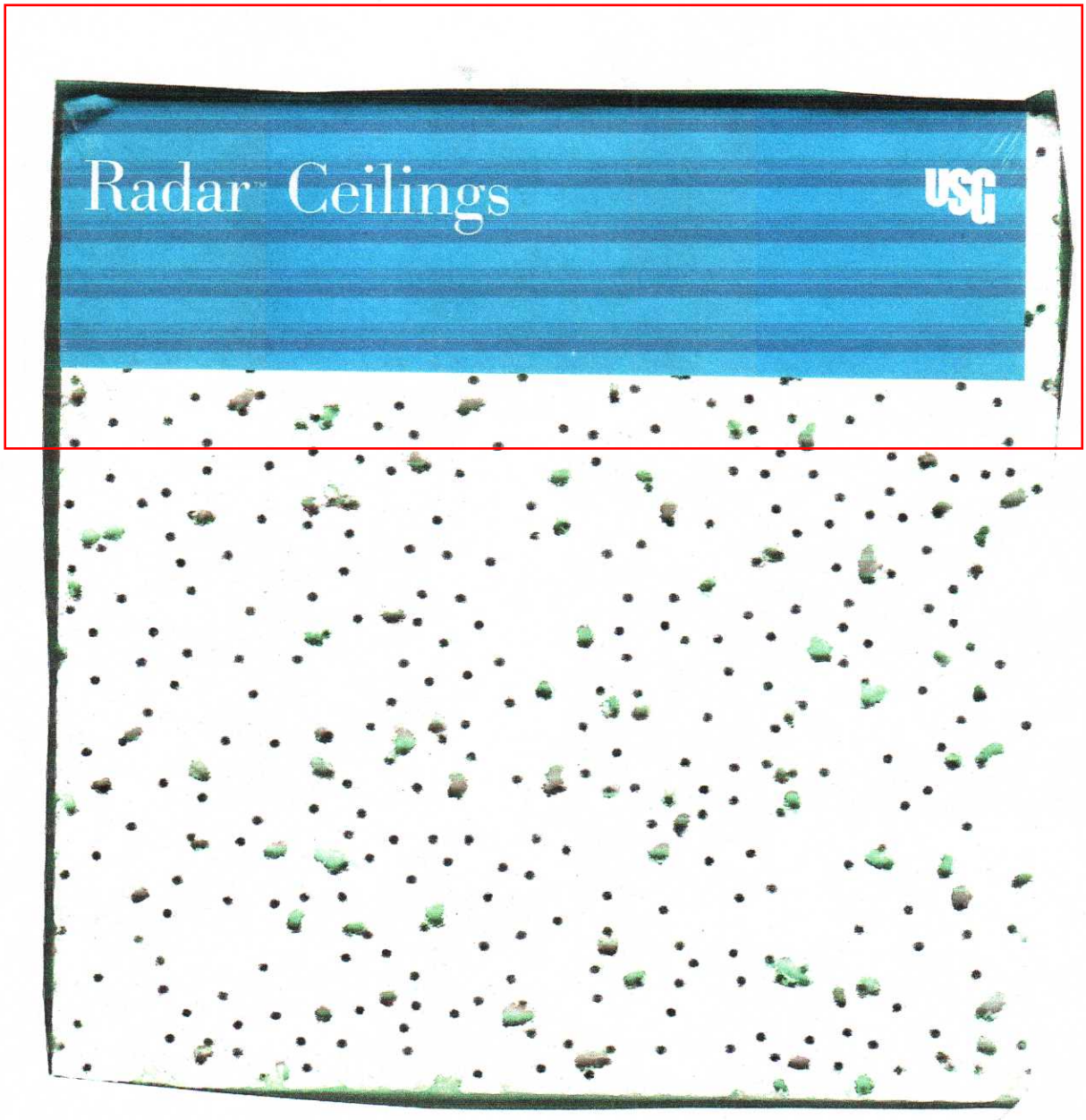
Notice
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

USG
Manufactured by USG Interiors, LLC
550 West Adams Street
Chicago, IL 60661

Safety First! Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

AC3167/rev. 11-12

Printed in U.S.A.


Radar™ Ceilings
USG

Radar™ Ceilings

Technical Service 800.USG.4100
Customer Service 800.950.3839
For Samples, Product Information
or Literature visit usg.com
and usgdesignstudio.com

Radar Panels

UL Classified

Edge	Panel Size	Class	Item No.	VOC Emissions	NRC	CAC Min.	LR	Grid Options	Recycled Content
SQ	2'x2'x5/8" 600x600x15	Class A	2110 ME2110	Low	.55	33	.83	A, B, C	24-28%
	2'x2'x5/8"		2115	Low	.55	35	.83	A	41-49%
	2'x4'x5/8" 600x1200x15	Class A	2310 ME2310	Low	.55	35	.83	A, B	24-28%
	2'x4'x5/8"		2315	Low	.55	35	.83	A	41-49%
	2'x5'x5/8"	Class A	2619	Low	.55	35	.83	A, B	24-28%
	20"x60"x5/8"	Class A	2617	Low	.55	35	.83	A, B	24-28%
	30"x60"x3/4"	Class A	2618	Low	.60	35	.83	A, B	24-28%
SLT	2'x2'x5/8" 600x600x15	Class A	2120 ME2120	Low	.55	33	.83	D	24-29%
	2'x2'x5/8"		2125	Low	.55	35	.83	D	49-58%[1] NRC
	2'x4'x5/8"	Class A	2320	Low	.55	35	.83	D	24-29%
FLB	2'x2'x5/8"	Class A	2130	Low	.55	33	.83	E, F, G, I	24-29%
BESK*	12"x12"x5/8"	Class A	2990	Low	.50	40	.83	H	44%

Low Emissions (VOC)
Low-Emitting performance meets CA Specification 01350 (CA Dept. of Health Services Standard Practice for the testing of VOC emissions) and is listed on CHPS data base for low-emitting materials. USG Certificate of Compliance for Low VOC Emissions also available on usg.com

*Not UL Classified for acoustics.
[1]Recycled content not available at all plants.

Grid Profile Options

A Donn® DX®/DXL™
B Donn® DXW™
C Centricitee™ DXT™
D Donn DX/DXL
E Centricitee DXT
F Fineline® DXF™
G Fineline® 1/8 DXFF™
H Donn® DX®/DXL™ Concealed
I Identitee™ DXI™

Colors
Available in White only.
ASTM E1264 classification
Type III, Form 2, Pattern C, E.
ASTM E84 surface burning characteristics
Class A; Flame spread: 25; Smoke developed: 50.
Thermal resistance
R-1.4 (Class A, 5/8" panels and tile).
R-1.7 (Class A, 3/4" panels).
R-1.4 (Class A, 15 mm panels).
R-1.6 (Firecode™, 5/8" panels).
Substrate
Water-felted mineral fiber.
Product Information
See usg.com for the most up-to-date product information. Data sheet: SC2288

Manufactured by
USG Interiors, LLC
550 West Adams Street
Chicago, IL 60661

This sample is a general representation of the texture and color of the ceiling product named above. Do not use for dimensional measurement or physical testing.

SC2153/rev. 5-13

SHERWIN-WILLIAMS
3411 5TH ST S
ARLINGTON, VA 22204 1719
(703) 527-8566

04/08/2015

MILLION CONSTRUCTION INC
7311 Highland St.,
Suite C
SPRINGFIELD VA 22150

Re: Submittal for PAX RIVER BUILDING 1652

Dear JOSE SOTO:

Thank you for using Sherwin-Williams products for the PAX RIVER BUILDING 1652 project. Included in this package is the Sherwin-Williams submittal for the above referenced project.

Should you require assistance or have any questions or concerns, please contact me at (703) 926-6120 or e-mail me at swrep6376@sherwin.com.

Sincerely,

QUANG T TRAN
Sherwin-Williams
Sales Representative

PAX RIVER BUILDING 1652

MILLION CONSTRUCTION INC
7311 Highland St.,
Suite C
SPRINGFIELD, VA 22150

Prepared By:

QUANG T TRAN
Sales Representative
swrep6376@sherwin.com
(703) 926-6120

SCHEDULE

DIVISION 3: EXTERIOR CONCRETE PAINT TABLE

A. 1. New & Existing Concrete, Vertical Surfaces - Latex Flat
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10
Topcoat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10

A. 1. New & Existing Concrete, Vertical Surfaces - Latex Semi-Gloss
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

A. 1. New & Existing Concrete, Vertical Surfaces - Latex Gloss
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

B. 1. New & Existing Concrete, Vert. Surfaces - Latex Aggregate Flat
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Intermediate Coat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10
Topcoat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10

B. 1. New & Existing Concrete, Vert. Surfaces - Latex Aggregate SG
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

B. 1. New & Existing Concrete, Vert. Surfaces - Latex Aggregate Gloss
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White

MPI 119

C. 1. New & Existing Concrete, Vert. Surfaces - Elastomeric System
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 113
Topcoat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 113

E. 1. New & Existing Cementitious Composition Board - Latex Flat
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10
Topcoat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10

E. 1. New & Existing Cementitious Composition Board - Latex Semi-GLos
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

E. 1. New & Existing Cementitious Composition Board - Latex GLoss
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

DIVISION 4: EXTERIOR CONCRETE MASONRY UNITS

A. 1. New & Existing Concrete Masonry Uncoated Surface - Latex Flat
Primer: A24W00200 - Loxon Masonry Coating System Block Surfacer White
MPI 4
Intermediate Coat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10
Topcoat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10

A. 1. New & Existing Concrete Masonry Uncoated Surface - Latex SG
Primer: A24W00200 - Loxon Masonry Coating System Block Surfacer White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

A. 1. New & Existing Concrete Masonry Uncoated Surface - Latex Glos
Primer: A24W00200 - Loxon Masonry Coating System Block Surfacer White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

B. 1. New & Existing Concrete Masonry Uncoated Surface-Textured Flat
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Intermediate Coat: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Topcoat: A24W00351 - Loxon® Masonry Coatings Systems Acrylic Coating Extra White
MPI 10

B. 1. New & Existing Concrete Masonry Uncoated Surface - Textured SG
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 42
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 42

B. 1. New & Existing Concrete Masonry Uncoated Surface-Textured Gloss
Primer: A44W00811 - UltraCrete Texture Coating Medium Extra White
MPI 42
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

C. 1. New & Existing Concrete Masonry Uncoated Surface - Elastomeric
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 113
Topcoat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 1113

DIVISION 5: EXTERIOR METAL, FERROUS & NON-FERROUS

A. 1. New Steel / Ferrous Surfaces, Hand/Power-Tool Cleaned -Alkyd SG
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 23
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

A. 1. New Steel/Ferrous Surfaces, Hand/Power-Tool Cleaned-Alkyd Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 23
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

B. 2. New Steel/Ferrous Surfaces, Blast-Cleaned - Alkyd Semi-Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

B. 2. New Steel/Ferrous Surfaces, Blast-Cleaned - Alkyd Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

C. 1. Existing Steel/Ferrous Surfaces, Spot-Blasted - Waterborne SG
Spot Prime: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

C. 1. Existing Steel/Ferrous Surfaces, Spot-Blasted -Waterborne Gloss
Spot Prime: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

C. 2. a. Existing Steel/Ferrous Surfaces, Spot-Blasted -Waterborne SG
Primer: B66A00050 - DTM Bonding Primer Off White
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

C. 2. a. Existing Steel/Ferrous Surfaces, Spot-Blasted-Waterborne Glos
Primer: B66A00050 - DTM Bonding Primer Off White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

C. 2. b. Existing Steel/Ferrous Surfaces, Spot-Blasted - Poly Gloss
Spot Prime: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
MPI 108 - 1:1 Mix Ratio with Part B, B58V600
Intermediate Coat: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
MPI 108 - 1:1 Mix Ratio with Part B, B58V600
Topcoat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600

D. 1. New & Existing Steel - Blast Cleaned - Waterborne Semi-Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

D. 1. New & Existing Steel - Blast Cleaned - Waterborne Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

D. 2. New & Existing Steel - Blast Cleaned - Polyurethane Gloss
Primer: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
MPI 108 - 1:1 Mix Ratio with Part B, B58V600
Intermediate Coat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600
Topcoat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600

E. 1. Metal Floors w/ Non-Skid Additive - Alkyd Gloss - Foot Traffic
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
With Sand Additive

F. 1. New Galvanized Surfaces - Latex Flat
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

F. 1. New Galvanized Surfaces - Latex Semi-Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White

MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

F. 1. New Galvanized Surfaces - Latex Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

F. 2. New Galvanized Surfaces - Latex Flat
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

F. 2. New Galvanized Surfaces - Latex Semi-Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

F. 2. New Galvanized Surfaces - Latex Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

F. 3. New Galvanized Surfaces - WB Light Industrial - Semi-Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

F. 3. New Galvanized Surfaces - WB Light Industrial - Gloss
Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White

MPI 164

F. 4. New Galvanized Surfaces - WB Light Industrial - Semi-Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

F. 4. New Galvanized Surfaces - WB Light Industrial - Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

F. 5. New Galvanized Surfaces - Pigmented Polyurethane - Gloss

Primer: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
1:1 Mix Ratio with Part B, B58V600
Intermediate Coat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600
Topcoat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600

G. 1. Existing Galvanized Surfaces - WB Light Industrial Semi-Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

G. 2. Existing Galvanized Surfaces - Pigmented Polyurethane Gloss

Primer: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
1:1 Mix Ratio with Part B, B58V600
Intermediate Coat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600
Topcoat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600

H. 1. Existing Galvanized Surfaces - WB Light Industrial Semi-Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
MPI 134
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

H. 1. Existing Galvanized Surfaces - WB Light Industrial Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

H. 2. Existing Galvanized Surfaces - Pigmented Polyurethane Gloss

Primer: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White
MPI 108 - 1:1 Mix Ratio with Part B, B58V600
Intermediate Coat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600
Topcoat: B65W00611 - Acrolon® 218 HS Polyurethane - Gloss (Part A) Extra White
MPI 72 - 4:1 Mix Ratio with Part B, B65V600

DIVISION 5: EXT SURFACES, OTHER METALS NON-FERROUS

I. 1. Aluminum, Aluminum Alloy, Miscellaneous Non-Ferrous - Alkyd SG

Primer: B50WZ0030 - Galvite® HS Solvent Based Acrylic Coating Off White
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

I. 1. Aluminum, Aluminum Alloy, Miscellaneous Non-Ferrous -Alkyd Gloss

Primer: B50WZ0030 - Galvite® HS Solvent Based Acrylic Coating Off White
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

I. 2. Aluminum, Aluminum Alloy, Miscellaneous -WB Light Ind. Eg-Shel

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W01251 - PI DTM EG EXTRA
MPI 161
Topcoat: B66W01251 - PI DTM EG EXTRA
MPI 161

I. 2. Aluminum, Aluminum Alloy, Miscellaneous -WB Light Ind. SemiGloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

I. 2. Aluminum, Aluminum Alloy, Miscellaneous - WB Light Ind. Gloss

Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer Off White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

I. 1. Existing Roof Surfaces Previously Coated - Alum. Asphalt Roof
First Coat: KST020475 - Uniflex® 500 Premium Roof Coating Aluminum
Topcoat: KST020475 - Uniflex® 500 Premium Roof Coating Aluminum

I. 2. Existing Roof Surfaces Previously Coated - Aluminum Paint
Primer: B66A00050 - DTM Bonding Primer Off White
Intermediate Coat: B59S00011 - Silver-Brite® Aluminum Paint
MPI 1
Topcoat: B59S00011 - Silver-Brite® Aluminum Paint
MPI 1

J. 1. Surfaces Adjacent to Painted Surfaces - Alkyd Semi-Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

J. 1. Surfaces Adjacent to Painted Surfaces - Alkyd Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

J. 2. Surfaces Adjacent to Painted Surfaces - WB Light Ind Eg-Shel
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B66W01251 - PI DTM EG EXTRA
MPI 161
Topcoat: B66W01251 - PI DTM EG EXTRA
MPI 161

J. 2. Surfaces Adjacent to Painted Surfaces - WB Light Ind Semi-Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163
Topcoat: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss Extra White
MPI 163

J. 2. Surfaces Adjacent to Painted Surfaces - WB Light Ind Gloss
Primer: B50WZ0004 - Kem Bond® HS High Solids Alkyd Universal Metal Primer Off White Off White
MPI 79
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 164

K. 1. Hot Metal Surfaces Subject to Temps up to 205 Deg C or 400 Deg F
Primer: B59A00305 - Kem Hi-Temp Heat Flex II 450 Dark Gray - Primer Dark Gray - Primer
MPI 21
Intermediate Coat: B59A00303 - Kem® Hi-Temp Heat Flex II 450 Shale Gray
MPI 21
Topcoat: B59A00303 - Kem® Hi-Temp Heat Flex II 450 Shale Gray
MPI 21

L. 1. Ferrous Metal Subject to High Temp up to 400 Deg C or 750 Deg F
Primer: B69VZ0012 - Zinc Clad® II Plus Inorganic Zinc-Rich Coating (Part A) Base Base
MPI 19 - with B69VZ15 Accelerator & B69D11 Zinc Dust

L. 2. Ferrous Metal Subject to High Temp up to 400 Deg C or 750 Deg F
Primer: B59S00008 - Silver-Brite® Hi-Heat Silicone Alkyd Aluminum Paint
MPI 2

M. 1. New & Existing Subject to Temp up to 593 Deg C or 1100 Deg F
Primer: 100001866 - HEAT-FLEX 1000 ALUM
MPI 22

DIVISION 6: EXT WOOD, LUMBER, PANELING, DECKING

A. 1. New/Existing Dressed Lumber, Wood/Plywood, Trim - Alkyd SG
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

A. 1. New/Existing Dressed Lumber, Wood/Plywood, Trim - Alkyd Gloss
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

A. 2. New/Existing Dressed Lumber, Wood/Plywood, Trim - Latex Flat
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

A. 2. New/Existing Dressed Lumber, Wood/Plywood, Trim - Latex SG
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White

MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

A. 2. New/Existing Dressed Lumber, Wood/Plywood, Trim - Latex Gloss
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

A. 3. New/Existing Dressed Lumber, Wood/Plywood, Trim-WB SC Stain
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
As Needed for Tanning
Intermediate Coat: A15W00051 - WoodScapes® Exterior Acrylic Solid Color Stain Extra White
MPI 16
Topcoat: A15W00051 - WoodScapes® Exterior Acrylic Solid Color Stain Extra White
MPI 16

B. 1. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Alkyd SG
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94
Topcoat: B55WZ0611 - Metalastic® DTM Acrylic Modified Enamel Extra White/Tint Base
MPI 94

B. 1. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Alkyd Gloss
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White
Topcoat: B54W00151 - Pro Industrial Urethane Alkyd Enamel Extra White

B. 2. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex Flat
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

B. 2. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex SG
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

B. 2. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex Gloss

Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

C. 1. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex Flat

Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
MPI 6
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

C. 1. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex SG

Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
MPI 6
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

C. 1. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - Latex Gloss

Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
MPI 6
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

C. 2. Existing Dressed Lumber, Wood/Plywood, Trim - P/C - WB SC Stain

Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
MPI 6
Intermediate Coat: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
MPI 16
Topcoat: A15W00051 - WoodScapes® Exterior Acrylic Solid Color Stain Extra White
MPI 16

D. 1. New Uncoated Wood Siding

Intermediate Coat: A15T00005 - WoodScapes® Exterior Polyurethane Semi-Transparent Stain Clear Base
Topcoat: A15T00005 - WoodScapes® Exterior Polyurethane Semi-Transparent Stain Clear Base

E. 1. Existing Previously Stained Wood Siding - Latex Flat

Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White

MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

E. 1. Existing Previously Stained Wood Siding - Latex Semi-Gloss
Primer: Y24W08020 - Exterior Oil-Based Wood Primer White
MPI 5
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

F. 1. Existing Uncoated/Previously Semi-Transp Stained Wood Siding
Intermediate Coat: A15T00005 - WoodScapes® Exterior Polyurethane Semi-Transparent Stain Clear Base
Topcoat: A15T00005 - WoodScapes® Exterior Polyurethane Semi-Transparent Stain Clear Base

G. 1. Wood Steps, Platforms, Porch Floors w/ Non-Skid Add -Latex Flat
Primer: B90W00110 - ArmorSeal® Tread-Plex Primer Acrylic Floor Coating Off White
Intermediate Coat: B90W00111 - ArmorSeal® Tread-Plex 100% Acrylic Floor Coating Extra White/ Tint Base
MPI 60
Topcoat: B90W00111 - ArmorSeal® Tread-Plex 100% Acrylic Floor Coating Extra White/Tint Base
MPI 60 - With Non-Skid Additive

G. 1. Wood Steps, Platforms, Porch Floors w/ Non-Skid Add -Latex Gloss
Primer: B90W00110 - ArmorSeal® Tread-Plex Primer Acrylic Floor Coating Off White
Intermediate Coat: B90W00111 - ArmorSeal® Tread-Plex 100% Acrylic Floor Coating Extra White/ Tint Base
MPI 68
Topcoat: B90W00111 - ArmorSeal® Tread-Plex 100% Acrylic Floor Coating Extra White/Tint Base
MPI 68 - With Non-Skid Additive

G. 2. Wood Steps, Platforms, Porch Floors w/ Non-Skid Add - Gloss
Primer: B90W00110 - ArmorSeal® Tread-Plex Primer Acrylic Floor Coating Off White
Intermediate Coat: B65W00775 - ArmorSeal® 1K Waterbased Urethane Extra White
Topcoat: B65W00775 - ArmorSeal® 1K Waterbased Urethane Extra White
With Non-Skid Additive

DIVISION 9: EXTERIOR STUCCO PAINT TABLE

A. 1. New & Existing Stucco - Latex Flat
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

A. 1. New & Existing Stucco - Latex Semi-Gloss
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

A. 1. New & Existing Stucco - Latex Gloss
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

B. 1. New & Existing Stucco - Elastomeric System
Primer: A24W08300 - Loxon® Concrete & Masonry Primer, Interior/Exterior Latex White
Intermediate Coat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 113
Topcoat: A05W00651 - SherLastic® Elastomeric Masonry Coating Extra White
MPI 113

DIVISION 10: EXT. CLOTH COVERINGS & BITUMINOUS

A. 1. Insulation & Surfaces of Insulation Coverings - Latex Flat
Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
Intermediate Coat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10
Topcoat: A74W00051 - SOLO Interior/Exterior 100% Acrylic, Flat Extra White
MPI 10

A. 1. Insulation & Surfaces of Insulation Coverings - Latex Semi-Gloss
Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
Intermediate Coat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11
Topcoat: A76W00051 - SOLO Interior/Exterior 100% Acrylic, Semi-Gloss Extra White
MPI 11

A. 1. Insulation & Surfaces of Insulation Coverings - Latex Gloss
Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
Primer: B51W00620 - PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer White
Intermediate Coat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119
Topcoat: B66W00611 - Pro Industrial High Performance Acrylic - Gloss Extra White
MPI 119

END OF SECTION

SURFACE PREPARATION

1) Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by cleaning per SSPC-SP1, Solvent Cleaning.

2) Block (Cinder and Concrete)
Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement, and hardeners. Concrete and mortar must be cured at least 30 days at 75°F.The pH of the surface should be between 6 and 9,unless the products to be used are designed to be used in high pH environments such as Loxon. On tilt-up and poured-in-place concrete, commercial detergents and abrasive blasting may be necessary to prepare the surface. Fill bug holes, air pockets, and other voids with a patching compound such as ConSeal.

3) Cement Composition Siding/Panels
Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Pressure clean, if needed, with a minimum of 2100 psi pressure to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. The pH of the surface should be between 6 and 9,unless the products to be used are designed to be used in high pH environments such as Loxon.

4) Drywall (Interior and Exterior)
Must be clean and dry. All nail heads must be set and spackled. Joints must be taped and covered with a joint compound. Spackled nail heads and tape joints must be sanded smooth and all dust removed prior to painting. Exterior surfaces must be spackled with exterior grade compounds.

5) Exterior Composition Board (Hardboard)
Some composition boards may exude a waxy material that must be removed with a solvent prior to coating. Whether factory primed or unprimed, exterior composition board siding (hardboard) must be cleaned thoroughly and primed with an alkyd primer.

6) Galvanized Metal
Allow to weather a minimum of 6 months prior to coating. Clean per SSPC-SP1 using detergent and water or a degreasing cleaner, then prime as required. When weathering is not possible or the surface has been treated with chromate's or silicates, first Solvent Clean per SSPC-SP1 and apply a test area, priming as required. Allow the coating to dry at least one week before testing. If adhesion is poor, Brush Blast per SSPC-SP7 is necessary to remove these treatments.

7) Previously Coated Surfaces
Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dull before repainting. Thorough washing with an abrasive cleanser will clean and dull in one operation, or, wash thoroughly and dull by sanding. Spot prime any bare areas with an appropriate primer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system. Check for compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system is incompatible, complete removal is required.

8) Hand Tool Cleaning
Hand Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mill scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife. Before hand tool cleaning, remove visible oil, grease, soluble residues, and salts by the methods outlined in SSPC-SP1. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No. 2 (SSPC-SP2)

9) Power Tool Cleaning
Power Tool Cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust, and paint be removed by this process. Mill scale, rust, and paint are considered adherent if they cannot be removed by lifting with a dull putty knife. Before power tool cleaning, remove visible oil, grease, soluble residues, and salts by the methods outlined in SSPC-SP1. For complete instructions, refer to Steel Structures Paint Council Surface Preparation Specification No.3.(SSP-PC3)

10) Commercial Blast Cleaning
A Commercial Blast Cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter, except for staining. Staining shall be limited to no more than 33 percent of each square inch of surface area and may consist of light shadows, slight streaks, or minor discoloration caused by stains of rust, stains of mill scale, or stains of previously applied paint. Before blast cleaning, visible deposits of oil or grease shall be removed by any of the methods specified in SSPC-SP1 or other agreed upon methods. For complete instructions, refer to Joint Surface Preparation Standard (SSPC-SP6/NACE No. 3)

11) Wood (Exterior)
Must be clean and dry. Prime and paint as soon as possible. Knots and pitch streaks must be scraped, sanded, and spot primed before a full priming coat is applied. Patch all nail holes and imperfections with a wood filler or putty and sand smooth.

12) Wood (Interior)
All finishing lumber and flooring must be stored in dry, warm rooms to prevent absorption of moisture, shrinkage, and roughening of the wood. All surfaces must be sanded smooth, with the grain, never across it. Surface blemishes must be corrected and the area cleaned of dust before coating.

END OF SPECIFICATION

Data Pages

LOXON®

Concrete & Masonry Primer/Sealer
Interior/Exterior Latex
A24W8300

As of 12/22/2014, complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

DESCRIPTION

Loxon Concrete & Masonry Primer/ Sealer is an acrylic coating specifically engineered for interior and exterior, above-grade, masonry surfaces requiring a high performance primer. It is highly alkali and efflorescence resistant and can be applied to surfaces with a pH of 6 to 13.

- Seals and adheres to concrete, brick, stucco and plaster
- Conditions porous masonry surfaces
- Use on above grade masonry surfaces for a long-lasting finish
- Apply to masonry and concrete surfaces that are at least 7 days old.
- Prevents harm to subsequent coatings by alkalies in the substrate

For use on these surfaces:
- Concrete
- Concrete Block
- Brick
- Stucco
- Fiber Cement Siding
- Plaster
- Mortar
- EIFS Exterior Wall Cladding

PHYSICAL PROPERTIES

Flexibility ..... Passes
ASTM D522 - Method B, 180° bend, 1/8" mandrel

Alkali Resistance ..... Passes
Based on ASTM D1308

Mildew Resistance ..... Passes
ASTM D3273/D3274

CHARACTERISTICS

Color: White

Coverage: 200-300 sq ft/gal
5.3 - 8.0 mils wet
2.1 - 3.2 mils dry
Coverage on porous & rough stucco 80 square feet per gallon

Drying Time, @ 77°F, 50% RH:
Touch: 4 hours
Recoat: 24 hours
Drying and recoat times are temperature, humidity and film thickness dependent.

Finish: 0-10 units @ 85°

Flash Point: N/A

Vehicle Type: Acrylic

A24W08300

VOC (less exempt solvents):
<50 g/L; 0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12

Volume Solids: 41 ± 2%

Weight Solids: 55 ± 2%

Weight per Gallon: 10.92 lb

WVP Perms (US) 22.3
grains/(hr ft^2 in Hg)

Tinting - For best topcoat color development, use the recommended "P"-shade primer. If desired, up to 4 oz per gallon of ColorCast Ecotoners can be used to approximate the topcoat color. Check color before use.

When spot priming on some surfaces, a non-uniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For optimal performance, this primer/ sealer must be topcoated with a latex, alkyd/oil, water based epoxy, or solvent based epoxy coating on architectural applications.

For exterior use, this primer/sealer must be topcoated within 14 days to prevent degradation due to weathering.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (**NIOSH** approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull.

Masonry/Concrete/Stucco
All new surfaces must cure for at least 7 days. Remove all form release and curing agents. Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair cracks, voids, and other holes with an appropriate patching compound or sealant.

continued on back

108.36

LOXON®

Concrete & Masonry Primer/Sealer
Interior/Exterior Latex
A24W8300

SURFACE PREPARATION

Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Caulking
Fill gaps between windows, doors, trim, and other through-wall openings with the appropriate caulk after priming the surface.

APPLICATION

Apply at temperatures above 50°F.
No reduction necessary.

Do not paint in direct sun or on a hot surface.
May be applied to damp but not to wet surfaces.

Brush
Use a nylon/polyester brush
Roller
Use a 1/2" to 1-1/2" nap synthetic cover

Airless Spray
Pressure..... 2000-2700 psi
Tip..... .019"

Spray and backroll on porous & rough stucco to achieve required film build and a pin-hole free surface.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

CAUTIONS

Protect from freezing.
Non-photochemically reactive.

LABEL CAUTIONS
CAUTION contains **CRYSTALLINE SILICA** and **ZINC**. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (**NIOSH** approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**
HOTW 12/22/2014 A24W08300 33 44

KOR, SP, FR, Viet

SHERWIN WILLIAMS.

102.30

LOXON®
Acrylic Coating
A24W300 Series

As of 12/01/2012, Complies with:			
OTC	Yes	LEED® 09CI	N/A
SCAQMD	Yes	LEED® 09NC	N/A
CARB	Yes	LEED® 09CS	N/A
CARB SCM 2007	Yes	LEED® H	N/A
MPI #	10	NGBS	N/A

CHARACTERISTICS

Loxon® Acrylic Coating is specifically engineered for exterior, above-grade, masonry surfaces requiring high performance protection. When primed with Loxon Concrete and Masonry Primer, it is highly alkali and efflorescence resistant. This system provides a highly durable and weather resistant finish to concrete, cement composition panels, concrete block, brick, and stucco. This combination may be applied to a surface with a pH of 8 to 13.

PHYSICAL PROPERTIES

Wind-Driven Rain Test .....Passes
ASTM D6904-03
1 ct Loxon Primer at 3.2 mils dft
2 cts Loxon Coating at 3.7 mils dft/ct

Water Vapor Permeance .....11.9 perms
Based on ASTM D1653
1 ct Loxon Coating at 9.4 mils dft,
14 day cure @ 77°F & 50% RH

Elongation 180%
ASTM D2370
1 ct Loxon Coating at 9.4 mils dft,
14 day cure @ 77°F & 50% RH

Tensile Strength .....340 psi
ASTM D2370
1 ct Loxon Coating at 9.4 mils dft,
14 day cure @ 77°F & 50% RH

Flexibility .....Passes
ASTM D522 - Method B, 180° bend,
1/8" mandrel

Alkali Resistance .....Passes
Based on ASTM D1308

Mildew Resistance .....Passes
ASTM D3273/D3274

SPECIFICATIONS

Color: Most colors
Coverage: 200 sq ft/gal
@ 8 mils wet; 3.7 mils dry
Coverage on porous & rough stucco 80 square feet per gallon
Drying Time, @ 77°F, 50% RH:
Touch: 4 hours
Recoat: 24 hours
Drying and recoat times are temperature, humidity, and film thickness dependent.
Finish: 0-10 units @ 85°
Flash Point: N/A
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-5	100%
Deep Base	4-12	100%

Vehicle Type: Acrylic
A24W00351
VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 43 ± 2%
Weight Solids: 60 ± 2%
Weight per Gallon: 11.5 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

For extremely porous block a coat of Loxon Block Surfacer may be required to achieve a pinhole free surface.

Concrete, Concrete Block, CMU, Split-face Block
1 ct. Loxon Concrete & Masonry Primer
2 cts. Loxon Acrylic Coating

Block
1 ct. Loxon Block Surfacer
or Heavy Duty Block Filler
2 cts. Loxon Acrylic Coating

Stucco
1 ct. Loxon Concrete & Masonry Primer
2 cts. Loxon Acrylic Coating

Spray and backroll on porous & rough stucco to achieve required film build and a pin-hole free surface.

continued on back

SHERWIN WILLIAMS.

102.30

LOXON®

Acrylic Coating
A24W300 Series

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer/sealer.

Concrete, CMU, Stucco
Remove all dirt, dust, mildew, loose particles, laitance, foreign material, peeling and defective coatings, chalk, form release agents, moisture curing membranes, etc.
On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern.
Allow the surface to dry thoroughly.
Sand glossy surfaces dull.
Concrete and mortar must be cured at least 28 days to apply this product directly.
Fill bugholes, air pockets, cracks, and other voids with an elastomeric patch or sealant.
Rough surfaces can be filled to provide a smooth surface.

SURFACE PREPARATION

Cement Composition Siding/Panels
Remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, if the pH is higher than 8, prime with Loxon Concrete and Masonry Primer.
Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.
Caulking
Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface.

APPLICATION

Apply at temperatures above 50°F.
No reduction necessary.
Do not paint in direct sun or on a hot surface. May be applied to damp but not to wet surfaces.
Brush - Use a nylon/polyester brush
Roller - Use a 1/2" to 1-1/2" synthetic cover
Spray—Airless
Pressure..... 2000-2700 psi
Tip..... .021"
Spray and backroll on porous & rough stucco to achieve required film build and a pin-hole free surface.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment.
Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

For exterior use only.
Protect from freezing.
Non-photochemically reactive.

LABEL CAUTION
CAUTION contains CRYSTALLINE SILICA and ZINC. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.
HOTW 03/25/2013 A24W00351 26 49

SHERWIN WILLIAMS.

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

101.88

SOLO®

100% Acrylic Interior/Exterior Semi-Gloss A76 Series

As of 03/29/2014, Complies with:			
OTC	Yes	LEED® 09CI	Yes
SCAQMD	Yes	LEED® 09NC	Yes
CARB	Yes	LEED® 09CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Solo 100% Acrylic Interior/Exterior creates a hard, scrubbable finish that is resistant to burnishing, wearing, and blocking. **Solo** is excellent choice for specifications where 100% acrylic interior finishes are required. **Solo** is designed for use on doors, trim, walls, & shutters. **Solo** can be applied to surfaces with a pH up to 13.

Colors: Most colors
To optimize hide and color development, always use the recommended P-Shade primer
Coverage: 350-400 sq ft/gal @ 4.0 mils wet; 1.5 mils dry
Drying Time, @ 77°F, 50% RH:
Touch: 1 hour
Recoat: 4 hours
Drying and recoat times are temperature, humidity, and film thickness dependent.
Flash Point: N/A
Finish: 35-45 units @ 60°
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-6	100%
Deep Base	4-12	100%
Ultradeep	10-12	100%

Vehicle Type: 100% Acrylic
Extra White A76W00051
VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 38 ± 2%
Weight Solids: 50 ± 2%
Weight per Gallon: 10.3 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

Apply 2 topcoats of Solo directly over existing properly prepared, interior or exterior coatings, or new interior bare drywall, plaster (cured with a pH of less than 13), masonry (cured with a pH of less than 13) and non-bleeding wood.

Interior
Drywall
Self-prime using 2 cts. of Solo, or
1 ct. ProMar 200 Zero VOC Primer
Plaster
Self-prime using 2 cts. of Solo, or
1 ct. Premium Wall & Wood Primer
Wood
Self-prime using 2 cts. of Solo, or
1 ct. Premium Wall & Wood Primer

Interior & Exterior
Aluminum & Galvanized Steel
(if needed)
1 ct. Pro Industrial Pro-Cryl Primer
Block
1 ct. PrepRite Block Filler
Masonry, Cement, Stucco
1 ct. Loxon Concrete & Masonry Primer
Steel
1 ct. Pro Industrial Pro-Cryl Primer

Exterior
Wood, Composition Board
1 ct. Exterior Oil-Based Wood Primer
or Exterior Latex Wood Primer
Plywood
1 ct. Exterior Latex Wood Primer

Other primers may be appropriate.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer.

Aluminum and Galvanized Steel
Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, steel wool, or other abrading method.

Drywall
Fill cracks and holes with patching paste/ spackle and sand smooth. Joint compounds must be cured and sanded smooth. Remove all sanding dust.

Masonry, Concrete, Block
All new surfaces must be cured at least 7 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. Repair cracks, voids, and other holes with an elastomeric patch or sealant.

continued on back

101.88

SOLO®

100% Acrylic
Interior/Exterior
Semi-Gloss
A76 Series

SURFACE PREPARATION

Plaster
All new surfaces must be cured at least 7 days. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with clear water and allow to dry.

Steel
Rust and mill scale must be removed using sandpaper, steel wool, or other abrading method. Bare steel must be primed the same day as cleaned.

Vinyl
Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly.

Wood
Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Caulking
Gaps between walls, ceilings, crown moldings, and other interior trim can be filled with the appropriate caulk after priming the surface.

APPLICATION

Apply at temperatures above 50°F.
No reduction needed.
Brush
Use a nylon/polyester brush.
Roller
Use a 1/4" - 1/2" nap synthetic cover.
Spray—Airless
Pressure..... 2000 psi
Tip..... .015"-.021"
Reduction.....Up to 1 pint per gallon

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

Non-photochemically reactive.
Protect from freezing.

Label Caution

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 03/29/2014 A76W00051 09 17

PRO INDUSTRIAL™

113.03

ACRYLIC

B66-600 SERIES GLOSS
B66-650 SERIES SEMI-GLOSS
B66-660 SERIES EG-SHEL

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

As of 04/15/2014, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Pro Industrial Acrylic is an ambient cured, single component 100% acrylic coating. It is designed for interior and exterior industrial and commercial applications

- Chemical resistant
- Excellent color and gloss retention
- Outstanding early moisture resistance
- Flash rust/early rust resistant
- Suitable for use in USDA inspected facilities
- Fast dry

Color: most colors

Recommended Spread Rate per coat:

Wet mils:	6.0 - 12.0
Dry mils:	2.5 - 4.0
Coverage:	140 - 225 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Time @ 7.0 mils wet 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	1 hr	30 min	5 min
Tack free:	8 hrs	5 hrs	15 min
To recoat:	8 hrs	5 hrs	15 min
To cure:	30 days	30 days	30 days

Drying time is temperature, humidity, and film thickness dependent.

Finish: Gloss, Semi-Gloss, Eg-Shel

Flash Point: N/A

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting with CCE only:

Base	oz/gal	Strength
Extra White	0-4	100%
Deep Base	8-12	100%
Ultradeep Base	8-12	100%

Extra White B66W00611
(may vary by color)

VOC Unreduced: <50 g/L; <0.42 lb/gal
as per 40 CFR 59.406 and SOR/2009-264, s. 12

Volume Solids: 35 ± 2%

Weight Solids: 44 ± 2%

Weight per Gallon: 9.5 lb/gal ±2%

RECOMMENDED SYSTEMS

Steel*:
2 cts. Pro Industrial Acrylic

Steel:
1 ct. Pro Industrial Pro-Cryl Primer
or DTM Acrylic Primer/Finish
or Kem Bond HS
or Zinc Clad Primer
1-2 cts. Pro Industrial Acrylic

Aluminum:
1-2 cts. Pro Industrial Acrylic

Aluminum:
1 ct. Pro Industrial Pro-Cryl Primer
1-2 cts. Pro Industrial Acrylic

Concrete Block:
1 ct. Loxon Block Surfacer
1-2 cts. Pro Industrial Acrylic

Concrete/Masonry:
1 ct. Loxon Concrete & Masonry Primer
1-2 cts. Pro Industrial Acrylic

Drywall
1 ct. ProMar 200 Primer
1-2 cts. Pro Industrial Acrylic

Galvanizing:
2 cts. Pro Industrial Acrylic

Prefinished Siding: (Baked-on finishes)
1 ct. DTM Bonding Primer
1-2 cts. Pro Industrial Acrylic

Wood, exterior:
1 ct. Exterior Wood Primer
1-2 cts. Pro Industrial Acrylic

Wood, interior:
1 ct. Premium Wall & Wood Primer

*Application of coating on unprimed steel may cause pinpoint rusting. Safety Colors, Deep Base, and Ultradeep colors require a prime coat for maximum durability, adhesion, and corrosion protection.

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
Finish: 2 cts. Pro Industrial Acrylic

Adhesion:
Method: ASTM D4541
Result: 1386 psi

Corrosion Weathering 8:
Method: ASTM D5894, 1500 hours, 5 cycles
Result: Rating 10, per ASTM D714 for blistering
Rating 9 per ASTM D1654 for corrosion

Direct Impact Resistance:
Method: ASTM D2794
Result: >160 in. lb

Dry Heat Resistance:
Method: ASTM D2485
Result: 250°F

Flexibility:
Method: ASTM D522, 180° bend, 1/8" mandrel
Result: Passes

Humidity Resistance*:
Method: ASTM D4585, 1500 hours
Result: Rating 10 per ASTM D714 for blistering
Rating 10 per ASTM D1654 for corrosion

Pencil Hardness:
Method: ASTM D3363
Result: 2B

Salt Fog Resistance*:
Method: ASTM B117, 1500 hours
Result: Rating 10 per ASTM D714 for blistering
Rating 9 per ASTM D1654 for corrosion

Thermal Cycling:
Method: ASTM D2246, 5 cycles
Result: Passes

*over Pro Industrial Pro-Cryl Primer

continued on back

PRO INDUSTRIAL™ ACRYLIC

SHERWIN-WILLIAMS

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Primer recommended for best performance.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Concrete and Masonry - For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI 03732, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F before filling. If required for a smoother finish, use the recommended filler/surfacer. The filler/surfacer must be thoroughly dry before topcoating per manufacturer's recommendations.

Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood - Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

CAUTIONS

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. FOR PROFESSIONAL USE ONLY. SEE MATERIAL SAFETY DATA SHEET.**

HOTW 4/15/2014 B66W00611 10 0

APPLICATION

Refer to the MSDS before use.

Temperature: 50°F minimum
120°F maximum
(Air, surface, and material)
At least 5°F above dew point

Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer Water

Airless Spray
Pressure .....1500 psi
Hose ..... 1/4" ID
Tip ..... .017" - .021"
Filter ..... 60 mesh
Reduction .....Not recommended

Conventional Spray
Gun ..... Binks 95
Fluid Nozzle..... 66
Air Nozzle 63PB
Atomization Pressure .....50 psi
Fluid Pressure ..... 15-20 psi
Reduction..... As needed up to 12½%by volume

Brush ..... Nylon / polyester
Reduction .....Not recommended
Roller .....3/8" woven
Reduction .....Not recommended

If specific application equipment is listed above, equivalent equipment may be substituted.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

NOTE: If coating is allowed to "set-up", Reducer #54 may be required for cleaning. Follow manufacturer's safety recommendations when using Reducer #54.

ULTRACRETE

Textured Masonry Topcoat
A44W800 Series

As of 12/01/2012, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI #	41, 42	NGBS	Yes

CHARACTERISTICS

UltraCrete Textured Masonry Topcoat is a 100% acrylic aggregate-filled coating used to produce a textured finish on properly prepared interior or exterior surfaces. The pleasing texture which results has the ability to minimize defects and irregularities found on poured cement aggregate block and sheetrock joints. The excellent adhesion of the product makes this suited for side walls, as well as for ceilings. May be used on concrete, aggregate block, sheetrock, cement, primed steel, and primed wood.

Color: Many colors
To optimize hide and color development, always use the recommended P-Shade primer

Coverage:
50-80 sq ft/gal depending on substrate porosity and texture size

Drying Time, @ 77°F, 50% RH:
Touch: 30 minutes to 1 hour
Recoat: 2 hours
Drying and recoat times are temperature, humidity, and film thickness dependent

Flash Point: N/A

Finish: Low Eg-Shel

Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-5	50%

Vehicle Type: Acrylic
A44W00811, Medium

VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12

Volume Solids: 50 ± 2%

Weight Solids: 59 ± 2%

Weight per Gallon: 10.1 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

Concrete, Tilt-Up, Precast, CMU, Stucco, Masonry, Cement Composition
UltraCrete can be used without a primer on surfaces with a pH between 6 and 9.
On high pH surfaces, 9 or greater, prime with:
1 ct. Loxon Masonry Primer
or Loxon Block Surfacer
Steel:
1 ct. All Surface Enamel Primer
Wood, Composition Board
1 ct. Exterior Oil-Based Wood Primer
Drywall (Interior)
1 ct. ProMar 200 Int Latex Primer
Drywall (exterior)
1 ct. Exterior Latex Wood Primer

Apply 1 or 2 coats of UltraCrete as needed.

APPLICATION

Apply at air, surface, and material temperatures above 50°F.
Do not reduce.
Brush, small areas only
Use a nylon/polyester brush.
Roller, small areas only
Spray - equipment must be specifically designed for aggregate coatings.

For Fine and Medium textures:
Graco ..... Graco RTX 1500
Pressure..... 30-35 psi air to the pump
Tips: ..... 3/16" or 1/4"
Reduction ..... none
Titan ..... Super Tex 6
Pressure..... 35 psi air to the pump.
Hose..... 3/4"
Tips ..... 3/16" or 1/4"

For Extra Coarse texture:
Graco .. 10:1 President Texture Pump

PERFORMANCE

Wind-Driven Rain Test ..... Passes
ASTM D6904-03
1 ct Loxon Primer at 3.2 mils dft
2 cts UltraCrete at 13.5-18.0 mils dft/ct
Water Vapor Permeance ..... 17.0 perms
Based on ASTM D1653
1 ct UltraCrete at 9.4 mils dft,
14 day cure @ 77°F & 50% RH
Flexibility ..... Passes
ASTM D522 - Method B, 180° bend, 1/8" mandrel
Alkali Resistance ..... Passes
Based on ASTM D1308
Mildew Resistance ..... Passes
ASTM D3273/3274
Impact Resistance ..... Passes
ASTM D2794
Salt Spray ..... no damage
ASTM B117, 300 hours
Adhesion ..... Passes
ASTM D3359 Method B
Freeze / Thaw Resistance ..... Passes
Based on ASTM D2243

continued on back

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ULTRACRETE

Textured Masonry Topcoat
A44W800 Series

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer/sealer.

Masonry, Concrete, Cement, Block, Cement Composition Panels
All new surfaces must be cured according to the supplier's recommendations—usually about 30 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Acrylic Primer. Cracks, voids, and other holes should be repaired with an elastomeric patch or sealant.

SURFACE PREPARATION

Stucco—Remove any loose stucco, efflorescence, or laitance. Allow new stucco to cure at least 30 days before painting. If painting cannot wait 30 days, allow the surface to dry 5-7 days and prime with Loxon Masonry Primer. Repair cracks, voids, and other holes with an elastomeric patch or sealant.
Wood—Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All patched areas must be primed.
Mildew—Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.
Caulking—Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment.
Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

Protect from freezing.
Non-photochemically reactive.
Do not use below grade or underwater.
On areas subject to wear, some of the texture may be abraded off.

CAUTION contains CRYSTALLINE SILICA. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.
HOTW 03/25/2013 A44W00811 16 42

SHERLASTIC®

Elastomeric Masonry Coating
A5-600 Series

As of 1/21/2015, Complies with:			
OTC	Yes	LEED® 09 CI	N/A
SCAQMD	Yes	LEED® 09 NC	N/A
CARB	Yes	LEED® 09 CS	N/A
CARB SCM 2007	Yes	LEED® H	N/A
MPI #	Yes	NGBS	N/A

CHARACTERISTICS

SherLastic Elastomeric Masonry Coating is a 100% acrylic coating that provides excellent flexibility, durability, and weather resistance. This product will protect against wind-driven rain when used on tilt-up, precast, or poured-in-place concrete, CMU, and stucco.
Any surface with a pH of 10 or greater must be primed using the Loxon Concrete & Masonry Primer/Sealer

Color: Many colors
To optimize hide and color development, always use the recommended P-Shade primer
Two coat system, brush, roller, or spray applied, coverage per coat:
115-160 sq ft/gal
10 - 14 mils wet; 4.0 - 6.0 mils dry
1 coat system, spray applied, coverage per coat:
60-80 sq ft/gal
20-28 mils wet; 8.0-12.0 mils dry
Can be applied up to 30 mils wet.
Coverage will vary with the substrate and the texture.
Drying Time, @ 77°F, 50% RH:
Touch: 4 hours
Recoat: 24 hours
Drying and recoat times are temperature, humidity, and film thickness dependent
Flash Point: N/A
Finish: 0-10 units @ 85°
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-5	100%
Deep Base	4-12	100%

Vehicle Type: 100% Acrylic
A05W00651
VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 41 ± 2%
Weight Solids: 53 ± 2%
Weight per Gallon: 10.79 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

PHYSICAL PROPERTIES

Wind-Driven Rain Test ..... Passes
ASTM D6904-03
1 ct Loxon Primer at 3.2 mils dft
2 cts at 4.0-6.0 mils dft/ct
Water Vapor Permeance ..... 37.1 perms
Based on ASTM D1653
1 ct at 5.0 mils dft,
14 day cure @ 77°F & 50% RH
Elongation 200%
ASTM D2370
1 ct at 4.5 mils dft,
14 day cure @ 77°F & 50% RH
Tensile Strength ..... 275 psi
ASTM D2370
1 ct at 4.5 mils dft,
14 day cure @ 77°F & 50% RH
Freeze - Thaw Resistance ..... Passes
Based on ASTM D2243
Mandrel Bend Flexibility ..... Passes
ASTM D522 - Method A
Low Temperature Flexibility ..... Passes
ASTM D1737 @ 32°F

SPECIFICATIONS

A minimum total dry film thickness of 8 - 12 mils of topcoat and a surface with 10 or less pinholes per square foot is required for a waterproofing system.
New Construction
Concrete, Stucco
1 ct. Loxon Concrete & Masonry Primer
1-2 cts. SherLastic Elastomeric Coating
Concrete Block, CMU, Split-face Block
1 ct. Loxon Block Surfacer
2 cts. SherLastic Elastomeric Coating
(2 coats recommended due to the typical porosity of these surfaces)
Previously Coated
1 ct. Loxon Concrete & Masonry Primer
or Loxon Conditioner
1-2 cts. SherLastic Elastomeric Coating

Other primers may be appropriate.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer.

Concrete, Stucco
Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalk, form release agents, moisture curing membranes, etc. Remove all mildew. Allow the surface to dry thoroughly. Concrete and mortar must be cured at least 7 days at 75°F. On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Fill bugholes, air pockets, cracks, and other voids with an elastomeric patch or sealant.

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SHERWIN WILLIAMS.

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SHERLASTIC®

Elastomeric Masonry Coating
A5-600 Series

SURFACE PREPARATION

Masonry surfaces must be dry, 15% or less of water, and within a pH range of 6 to 10. If the pH is above 10, prime the surface first with Loxon Concrete & Masonry Primer/Sealer.

Sealing and Patching
After cleaning the surface thoroughly, prime any bare surface with Loxon Concrete & Masonry Primer/Sealer, apply an elastomeric patch or sealant if needed, allow to dry, then topcoat.
To improve the performance consider:

- Use caution when preparing the substrate to create a uniform surface.
- Patch cracks, crevices, and openings with an elastomeric patch or sealant
- Stripe coat all inside and outside corners and edges with 1 coat of SherLastic Elastomeric Masonry Coating.

APPLICATION

Apply at temperatures between 50°F and 100°F. **Do not reduce.**
Brush - Use a nylon/polyester brush. Avoid over-brushing which causes air bubbles.
Roller - Use a ½" to 1½" nap synthetic roller cover. Avoid rapid rolling which causes bubbling.
Spray—Airless
Pressure, minimum ..... 2300 psi
Tip, minimum..... .021"

The substrate and its condition will determine the application procedure. Considerations to minimize pinholes:

- 2 coat application with overnight drying between coats
- Spray application with backrolling
- Power rolling

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

CAUTIONS

For exterior use only.
Protect from freezing.
Non-photochemically reactive.
Not for use on horizontal surfaces (floors, roofs, decks, etc.) where water will collect.
Not for use on overhead horizontal surfaces (under sides of balconies, soffits, etc.)
Not for use below grade. Will not withstand hydrostatic pressure.

CAUTIONS
CAUTION contains **CRYSTALLINE SILICA** and **ZINC.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (**NIOSH** approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 1/21/2015 A05W00651 05 25

SP

LOXON®
Block Surfacer
A24W00200

As of 03/05/2015, Complies with:			
OTC	Yes	LEED® 09CI	Yes
SCAQMD	Yes	LEED® 09NC	Yes
CARB	Yes	LEED® 09CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Loxon® Block Surfacer is a lightweight technology, 100% acrylic resin surfacer for interior and exterior poured and precast concrete, concrete block, cinder block, and stucco. It is designed to smooth and uniform surfaces, eliminating pinholes.

Loxon Block Surfacer's technology solves problems:
- faster production rates
- excellent filling and sealing properties
- suitable for use in USDA-inspected facilities
- topcoat with high performance coatings such as epoxies and urethanes
- alkali resistant from 8 to 13 pH
- use at temperatures down to 35°F

Color: Off White
Coverage: 50-100 sq ft/gal @ 16 mils wet; 8 mils dry
Drying Time @ 50% RH, 16 mils wet: temperature and humidity dependent

	@ 35-55°F	@ 55°F+
Touch:	2 hours	1 hour
Recoat:		
with latex:	24 hours	8 hours
with alkyd:	48 hours	48 hours
with high performance:	48 hours	48 hours

Air and surface temperatures must not drop below 35°F for 48 hours after application.
Flash Point: N/A
Finish: Flat
Tinting:

Base	oz/gal	Strength
White	0-2	N/A

Vehicle Type: Acrylic
White A24W00200
VOC (less exempt solvents): 85 g/L; 0.71 lb/gal
Volume Solids: 55 ± 2%
Weight Solids: 60 ± 2%
Weight per Gallon: 9.39 lb
WVP Perms (US) 42.2 grains/(hr ft^2 in Hg)

SPECIFICATION

Masonry, Concrete, Cement, Block
1 ct. Loxon Block Surfacer
2 cts. Appropriate topcoat

Recommended Architectural Topcoats
A-100 Exterior Latex
Loxon XP Masonry Coating
SuperPaint Exterior
Duration Exterior
Emerald Exterior

Emerald Interior
Duration Home
ProClassic Interior
ProMar Interior
SuperPaint Interior

Recommended Industrial Topcoats
Corothane I Aliphatic Finish
Corothane II Polyurethane
Pro Industrial DTM Acrylic
Epolon II Multi-Mil Epoxy
Industrial Enamel
Macropoxy HS Epoxy
Macropoxy 646
Steel Master 9500 Silicone Alkyd
Tile-Clad HS Epoxy
Water Based Catalyzed Epoxy

Industrial topcoats have been tested for interior use only. Loxon Block Surfacer has not been tested in environments subject to chemical attack. Any recommendations for use in such areas must follow a thorough evaluation of the effects of the environment on the Loxon Block Surfacer and topcoat system.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (**NIOSH** approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with an appropriate primer/sealer.

Masonry, Concrete, Cement, Block
If needed, pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalk, form release agents, moisture curing membranes, etc. Allow the surface to dry thoroughly. Existing peeled or checked paint should be removed to a sound surface. Concrete and mortar must be cured at least 7 days at 75°F. On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Fill bugholes, air pockets and other voids with an elastomeric patch or sealant.

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LOXON®
Block Surfacer
A24W00200

SURFACE PREPARATION

Mildew
Remove mildew before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

APPLICATION

Do not apply at temperatures below 35°F. Air and surface temperatures must not drop below 35°F for 48 hours after application.

Brush
Brush.....Nylon/Polyester
Reduction.....not recommended

Roller
Cover .....½" - 1½" synthetic
Reduction.....not recommended

Airless Spray
Pressure..... 2000 psi
Hose.....1/4" - 3/8" ID
Tip..... .015" - .031"
Filter .....30 mesh
Reduction.....not recommended

Spray application should be backrolled as needed to work material into the surface. All application methods may be squeegeed to provide a very smooth surface.

CLEANUP INFORMATION

Clean spills and spatters, hands and tools immediately with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvents to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

CAUTIONS

For interior and exterior use.
Must be topcoated for exterior use.
Protect from freezing.
Do not apply to damp or wet surfaces.
Do not apply at temperatures below 35°F. Air and surface temperatures must not drop below 35°F for 48 hours after application.

CAUTION contains **CRYSTALLINE SILICA**. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (**NIOSH** approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

HOTW 03/05/2015 A24W00200 34 85

Protective & Marine Coatings

KEM BOND® HS
UNIVERSAL METAL PRIMER

B50NZ3	Red Oxide
B50WZ4	Off White
B50AZ8	Gray

Revised 12/11

Product Information

2.12

Product Description

KEM BOND HS is a fast drying, high solids, low VOC, heavy metal free, rust inhibitive, universal, phenolic alkyd metal primer. Kem Bond HS can be topcoated with alkyd, acrylic, and high performance coatings. Also suitable as a "barrier" coat over conventional coatings which would normally be attacked by strong solvents in high performance coatings.

- High build to protect sandblasted steel
- Good corrosion and rust protection
- Can be used as a "universal" primer under high performance topcoats
- Fast drying
- Low temperature application

Product Characteristics

Finish:	Flat
Color:	Red Oxide, Off White, Gray
Volume Solids:	61% ± 2%, may vary by color
Weight Solids:	79% ± 2%, may vary by color
VOC (EPA Method 24):	Unreduced: <320 g/L; 2.65 lb/gal Reduced 5%: <340 g/L; 2.80 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**8.0** (200)
Dry mils (microns)	**2.0** (50)	**5.0** (125)
~Coverage sq ft/gal (m^2/L)	**195** (4.8)	**490** (12.0)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**976** (24.0)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	30 minutes	10 minutes
To handle:	3 hours	1 hour	15 minutes
To recoat:			
alkyds	6 hours	2 hours	1 hour
urethane	24 hours	24 hours	6 hours
acrylic	48 hours	24 hours	6 hours
To cure:	5 days	2 days	1 day

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	90°F (32°C), PMCC
Reducer/Clean Up:	Xylene R2K4

Recommended Uses

For industrial application on steel to protect against atmospheric corrosion. Interior/exterior use. A premium shopcoat primer. For use under a variety of coatings, including high performance topcoats.

- Rail cars
- Structural steel
- Machinery and equipment
- Piping and pipe racks
- Marine applications
- Tanks
- Bridges
- Vessels
- Bulkheads
- Conforms to AWWA D102, OCS #1
- Suitable for use in USDA inspected facilities
- Acceptable for use in high performance architectural applications.

Performance Characteristics

Substrate*: Steel

Surface Preparation*: SSPC-SP2

System Tested*:

1 ct. Kem Bond HS @ 3.0 mils (75 microns) dft

1 ct. Industrial Enamel HS @ 3.0 mils (75 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance (primer only)	ASTM D4060, 500 cycles, 500 gm Load	46 mg loss
Adhesion	ASTM D4541	392 psi
Direct Impact Resistance (primer only)	ASTM D2794	60 in. lbs.
Dry Heat Resistance, primer only	ASTM D2485	250°F (121°C) (discolors)
Exterior Durability	1 year at 45° South	Excellent
Flexibility (primer only)	ASTM D522, 180° bend, 1" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 500 hours	No blisters, rust, delamination, or creepage
Pencil Hardness	ASTM D3363	H
Salt Fog Resistance	ASTM B117, 500 hours	No softening, cracking, or delamination; No more than 1/32" rust creepage at scribe
Thermal Shock	ASTM D2246, 15 cycles	Passes

Provides performance comparable to products formulated to federal specifications: TT-P-664.

continued on back

Protective & Marine Coatings

KEM BOND® HS
UNIVERSAL METAL PRIMER

B50NZ3	Red Oxide
B50WZ4	Off White
B50AZ8	Gray

Product Information

2.12

Recommended Systems

		Dry Film Thickness / ct. Mils	(Microns)
Steel, Alkyd Topcoat:			
1 ct.	Kem Bond HS Primer	2.0-5.0	(50-125)
1-2 cts.	Industrial Enamel HS Series	2.0-4.0	(50-100)
Steel, Aluminum Finish:			
1 ct.	Kem Bond HS Primer	2.0-5.0	(50-125)
1-2 cts.	Silver-Brite Aluminum	1.0-1.5	(25-40)
Steel, Epoxy Topcoat:			
1 ct.	Kem Bond HS Primer	2.0-5.0	(50-125)
1-2 cts.	Tile-Clad HS Epoxy	2.5-4.0	(63-100)
Steel, Acrylic Topcoat:			
Topcoat only after 24 hours minimum dry 77°F & 50% RH			
1 ct.	Kem Bond HS Primer	2.0-5.0	(50-125)
1-2 cts.	DTM Acrylic Coating	2.5-4.0	(63-100)
	or		
1-2 cts.	Sher-Cryl HPA	2.5-4.0	(63-100)
Steel, Polyurethane Topcoat:			
1 ct.	Kem Bond HS Primer	2.0-5.0	(50-125)
1-2 cts.	Sherthane 2K Urethane	2.5-5.0	(63-125)
	or		
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)

The systems listed above are representative of the product's use, other systems may be appropriate.

Disclaimer

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Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
Iron & Steel: SSPC-SP2

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

Tinting

Do not tint.

Application Conditions

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

Ordering Information

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight (Red Oxide):	13.26 ± 0.2 lb/gl, 1.6 Kg/L
Weight (Off White):	13.70 ± 0.2 lb/gl, 1.65 Kg/L

Safety Precautions

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

KEM BOND® HS
UNIVERSAL METAL PRIMER

B50NZ3	Red Oxide
B50WZ4	Off White
B50AZ8	Gray

Revised 12/11

Application Bulletin

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Surface Preparations

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel
Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard, or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

Application Conditions

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Application Equipment

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up .....Xylene, R2K4

Airless Spray
Pressure.....1800 psi minimum
Hose.....1/4 - 3/8" ID
Tip.....017" - .019"
Filter.....60 mesh
Reduction.....As needed up to 5% by volume

Conventional Spray ..... Not recommended

Brush
Brush.....Natural Bristle or Nylon Polyester
Reduction.....Not recommended

Roller
Cover .....1/4 - 3/8" woven solvent resistant core
Reduction.....Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

KEM BOND® HS

UNIVERSAL METAL PRIMER

B50NZ3	Red Oxide
B50WZ4	Off White
B50AZ8	Gray

Application Bulletin

2.12

Application Procedures

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**8.0** (200)
Dry mils (microns)	**2.0** (50)	**5.0** (125)
~Coverage sq ft/gal (m^2/L)	**195** (4.8)	**490** (12.0)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**976** (24.0)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	30 minutes	10 minutes
To handle:	3 hours	1 hour	15 minutes
To recoat:			
alkyds	6 hours	2 hours	1 hour
urethane	24 hours	24 hours	6 hours
acrylic	48 hours	24 hours	6 hours
To cure:	5 days	2 days	1 day

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Clean Up Instructions

Clean spills and spatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer's safety recommendations when using any solvent.

Disclaimer

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

Performance Tips

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

Intimate contact of the steel surface and primer is necessary for adhesion and rust inhibition.

According to AISC, shop coat primers are intended for protection for only a short period of exposure in ordinary atmospheric conditions, and is considered a temporary and provisional coating.

Not recommended for immersion service or exposure to acids or alkalis.

Refer to Product Information sheet for additional performance characteristics and properties.

Safety Precautions

Refer to the MSDS sheet before use.

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Warranty

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Protective & Marine Coatings

METALASTIC® DTM
ACRYLIC MODIFIED ENAMEL

B55Z-600 SERIES

Revised 7/10

PRODUCT INFORMATION

2.24

PRODUCT DESCRIPTION

METALASTIC DTM is a VOC compliant, high-build acrylic modified enamel with rust-inhibitive properties for application directly to bare steel. Provides an economical alternative to many maintenance and new construction projects.

- VOC compliant
- Good gloss and color retention
- Corrosion resistance and finish coat protection in one coat
- Outstanding long term performance
- Excellent application properties

PRODUCT CHARACTERISTICS

Finish:	Semi-Gloss
Color:	Wide range of colors available
Volume Solids:	59% ± 2%, may vary by color
Weight Solids:	76% ± 2%, may vary by color
VOC (EPA Method 24):	Unreduced: <330 g/L; 2.75 lb/gal Reduced 3½%: <340 g/L; 2.8 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**5.0** 125	**8.0** 200
Dry mils (microns)	**3.0** 75	**5.0** 125
~Coverage sq ft/gal (m^2/L)	**190** 4.7	**315** 7.2
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**944** 23.1	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	3 hours	1.5 hours	45 minutes
To handle:	10 hours	6 hours	1 hours
To recoat:	36 hours	18 hours	6 hours
To cure:	14 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	120°F (49°C), PMCC
Reducer/Clean Up:	
Below 80°F (27°C):	VM&P Naphtha, R1K3
Above 80°F (27°C):	Hi-Flash Naphtha, R2K5

RECOMMENDED USES

For use over prepared steel in industrial environments.

- Interior / exterior
- New construction
- Machinery
- Structural steel
- Steel doors
- Steel decking
- Primer / finish
- Repaints
- Storage tank exteriors
- Bar joists
- Piping
- Conveyors
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102 OCS #1

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP6/NACE 3

System Tested*:

2 cts. Metalastic DTM @ 3.0 mils (75 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	50 mg loss
Adhesion	ASTM D4541; ASTM D3359	420 psi (ASTM D4541); 5B (ASTM D3359)
Corrosion Weathering	ASTM D5894, 2 cycles, 672 hours	Rating 10 per ASTM D610 for rusting
Direct Impact Resistance	ASTM D2794	50 in. lbs.
Dry Heat Resistance	ASTM D2485	200°F (93°C) (discolors)
Flexibility	ASTM D522, 180° bend, 1/4" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (93°C), 1000 hours	Rating 10 per ASTM D610 for rusting
Pencil Hardness	ASTM D3363	3B
Salt Fog Resistance	ASTM B117, 1000 hours	Rating 10 per ASTM D610 for rusting

Provides performance comparable to products formulated to federal specifications: MIL-E-15090, TT-E-485F

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Protective & Marine Coatings

METALASTIC® DTM
ACRYLIC MODIFIED ENAMEL

B55Z-600 SERIES

PRODUCT INFORMATION

2.24

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel, Light Service:			
1 ct.	Metalastic DTM	3.0-5.0	(75-125)
Steel, Moderate Service:			
2 cts.	Metalastic DTM	3.0-5.0	(75-125)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
Iron & Steel: SSPC-SP2

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Tint with BAC or Maxitoner colorants at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	11.5 ± 0.2 lb/gl, 1.38 Kg/L may vary with color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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Protective & Marine Coatings

METALASTIC® DTM
ACRYLIC MODIFIED ENAMEL

B55Z-600 SERIES

Revised 7/10

APPLICATION BULLETIN

2.24

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Coat any bare steel within 8 hours or before flash rusting occurs.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this products attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up

Below 80°F (27°C) .....VM&P Naphtha, R1K3
Above 80°F (27°C).....Hi-Flash Naphtha, R2K5

Airless Spray

Pressure.....2400 psi
Hose.....3/8" ID
Tip .....015"
Filter .....60 mesh
Reduction.....Not recommended

Conventional Spray

Gun .....Binks 95
Fluid Nozzle 63B
Air Nozzle.....63PB
Atomization Pressure.....50 psi
Fluid Pressure.....20-25 psi
Reduction.....As needed, up to 3½% by volume

Brush

Brush.....Natural Bristle
Reduction.....As needed, up to 3½% by volume

Roller

Cover .....3/8" woven with solvent resistant core
Reduction.....As needed, up to 3½% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

METALASTIC® DTM
ACRYLIC MODIFIED ENAMEL

B55Z-600 SERIES

APPLICATION BULLETIN

2.24

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**5.0** 125	**8.0** 200
Dry mils (microns)	**3.0** 75	**5.0** 125
~Coverage sq ft/gal (m^2/L)	**190** 4.7	**315** 7.2
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**944** 23.1	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	3 hours	1.5 hours	45 minutes
To handle:	10 hours	6 hours	1 hours
To recoat:	36 hours	18 hours	6 hours
To cure:	14 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with VM&P Naphtha, R1K3. Clean tools immediately after use with VM&P Naphtha, R1K3. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with VM&P Naphtha, R1K3.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

PRO INDUSTRIAL™

113.11

URETHANE ALKYD ENAMEL

B54-150 SERIES

As of 03/01/2013, Complies with:			
OTC	Yes	LEED® 09 CI	No
SCAQMD	No	LEED® 09 NC	No
CARB	No	LEED® 09 CS	No
CARB SCM 2007	No	LEED® 09 S	No
MPI Spec #	No	NGBS	No

CHARACTERISTICS

Pro Industrial Urethane Alkyd Enamel is a high solids, high gloss coating intended for interior/exterior use in industrial environments. It is easy to brush, roll or spray. Provides performance comparable to silicone alkyds.

- Modified with urethane resin for increased exterior durability
- Resistant to chipping and flaking
- Resists premature yellowing
- Abrasion resistant
- Appropriate for interior and exterior applications
- Very good gloss and color retention
- Excellent application characteristics
- Suitable for use in USDA inspected facilities

Color: Most Colors

Recommended Spread Rate per coat:

Wet mils:	3.5 - 7.0
Dry mils:	2.0 - 4.0
Coverage:	231 - 462 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Time @ 4.0 mils wet 50% RH:

	45°F	77°F	120°F
To touch:	4 hrs	2½ hrs	30 min
Tack free:	10 hrs	4 hrs	2 hrs
To recoat:	36 hrs	18 hrs	8 hrs
To cure:	7 days	7 days	5 days

Drying time is temperature, humidity, and film thickness dependent.

Finish: Gloss

Flash Point: 103°F, PMCC

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting with Blend-A-Color or MaxiToner:

Base	oz/gal	Strength
Extra White	0-6	100%
Ultradeep	4-12	100%

B54W00151 (may vary by color)

VOC (EPA Method 24): Unreduced: <330g/L; <2.75 lb/gal

Volume Solids: 58% ± 2%

Weight Solids: 72% ± 2%

Weight per Gallon: 9.8 lb

RECOMMENDED SYSTEMS

Steel (alkyd primer):
1 ct. Kem Bond HS Primer
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Aluminum:
1 ct. DTM Wash Primer
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Galvanized Metal:
1 ct. Galvite HS
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Concrete Block:
1 ct. Heavy Duty Block Filler
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Interior Plaster and Poured Concrete:
1 ct. Loxon Masonry Primer
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Drywall:
1 ct. ProMar 200 Latex Primer
1-2 cts. Pro Industrial Urethane Alkyd Enamel

Wood Floors (Foot Traffic):
1-2 cts. Pro Industrial Urethane Alkyd Enamel

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
1 ct. Kem Bond HS Primer
1 ct. Pro Industrial Urethane Alkyd Enamel

Abrasion
Method: ASTM D4060, C517 wheel, 1000 cycles,1 kg load
Result: 175 mg loss

Adhesion
Method: ASTM D4541
Result: 392 psi

Direct Impact Resistance
Method: ASTM D2794
Result: 60 in. lbs.

Dry Heat Resistance
Method: ASTM D2485
Result: 200°F (93°C) (discolors)

Flexibility
Method: ASTM D522, 180° bend, 1/4" mandrel
Result: Passes

Humidity Resistance
Method: ASTM D4548, 500 hours
Result: Rating 10 per ASTM D610 for Rusting; Rating 10 per ASTM D714 for Blistering

Pencil Hardness
Method: ASTM D3363
Result: B

Salt Fog Resistance
Method: ASTM B117, 500 hours
Result: Rating 10 per ASTM D610 for Rusting; Rating 10 per ASTM D714 for Blistering

continued on back

PRO INDUSTRIAL™
URETHANE ALKYD ENAMEL

SHERWIN-WILLIAMS®

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Hand Tool Clean per SSPC-SP2. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Primer required. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Masonry and Concrete
For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No. 310.2, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with ArmorSeal Crack Filler. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Laitance must be removed. Brick must be allowed to weather for one year prior to surface preparation and painting. Primer required.

Wood
Surface must be clean, dry, and sound. Paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed. All nail holes or small openings must be properly caulked. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Self priming.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

APPLICATION

Refer to the MSDS before using
Temperature: 40°F minimum
120°F maximum
(air, surface, and material)
At least 5°F above dew point
Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer/Clean Up
Mineral Spirits, R1K4* or Xylene, R2K4

Airless Spray
Pressure ..... 1800 psi minimum
Hose ..... 3/8" ID
Tip ..... .017" - .019"
Filter ..... 60 - 100 mesh
Reduction..... As needed up to 10% by volume

Conventional Spray
Gun ..... Binks 95
Fluid Nozzle..... 66
Air Nozzle 63PB
Atomization Pressure .....50 psi
Fluid Pressure ..... 20-25 psi
Reduction..... As needed up to 10% by volume

Brush
Brush.....Nylon/polyester or natural bristle
Reduction..... As needed up to 10% by volume

Roller
Cover
1/4 - 3/8" lambswool or synthetic cover
Reduction..... As needed up to 10% by volume

* To maintain VOC compliance of 340 g/l, only a 2% reduction of Mineral Spirits, R1K4 is allowed.

CLEANUP INFORMATION

Clean spills, spatters, and tools immediately after use with mineral spirits. Follow manufacturer's safety recommendations when using mineral spirits.

PRO INDUSTRIAL™

113.03

ACRYLIC

B66-600 SERIES GLOSS
B66-650 SERIES SEMI-GLOSS
B66-660 SERIES EG-SHEL

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

As of 04/15/2014, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Pro Industrial Acrylic is an ambient cured, single component 100% acrylic coating. It is designed for interior and exterior industrial and commercial applications

- Chemical resistant
- Excellent color and gloss retention
- Outstanding early moisture resistance
- Flash rust/early rust resistant
- Suitable for use in USDA inspected facilities
- Fast dry

Color: most colors

Recommended Spread Rate per coat:

Wet mils:	6.0 - 12.0
Dry mils:	2.5 - 4.0
Coverage:	140 - 225 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Time @ 7.0 mils wet 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	1 hr	30 min	5 min
Tack free:	8 hrs	5 hrs	15 min
To recoat:	8 hrs	5 hrs	15 min
To cure:	30 days	30 days	30 days

Drying time is temperature, humidity, and film thickness dependent.

Finish: Gloss, Semi-Gloss, Eg-Shel

Flash Point: N/A

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting with CCE only:

Base	oz/gal	Strength
Extra White	0-4	100%
Deep Base	8-12	100%
Ultradeep Base	8-12	100%

Extra White B66W00611
(may vary by color)

VOC Unreduced: <50 g/L; <0.42 lb/gal
as per 40 CFR 59.406 and SOR/2009-264, s. 12

Volume Solids: 35 ± 2%

Weight Solids: 44 ± 2%

Weight per Gallon: 9.5 lb/gal ±2%

RECOMMENDED SYSTEMS

Steel*:
2 cts. Pro Industrial Acrylic

Steel:
1 ct. Pro Industrial Pro-Cryl Primer
or DTM Acrylic Primer/Finish
or Kem Bond HS
or Zinc Clad Primer
1-2 cts. Pro Industrial Acrylic

Aluminum:
1-2 cts. Pro Industrial Acrylic

Aluminum:
1 ct. Pro Industrial Pro-Cryl Primer
1-2 cts. Pro Industrial Acrylic

Concrete Block:
1 ct. Loxon Block Surfacer
1-2 cts. Pro Industrial Acrylic

Concrete/Masonry:
1 ct. Loxon Concrete & Masonry Primer
1-2 cts. Pro Industrial Acrylic

Drywall
1 ct. ProMar 200 Primer
1-2 cts. Pro Industrial Acrylic

Galvanizing:
2 cts. Pro Industrial Acrylic

Prefinished Siding: (Baked-on finishes)
1 ct. DTM Bonding Primer
1-2 cts. Pro Industrial Acrylic

Wood, exterior:
1 ct. Exterior Wood Primer
1-2 cts. Pro Industrial Acrylic

Wood, interior:
1 ct. Premium Wall & Wood Primer

*Application of coating on unprimed steel may cause pinpoint rusting. Safety Colors, Deep Base, and Ultradeep colors require a prime coat for maximum durability, adhesion, and corrosion protection.

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
Finish: 2 cts. Pro Industrial Acrylic

Adhesion:
Method: ASTM D4541
Result: 1386 psi

Corrosion Weathering 8:
Method: ASTM D5894, 1500 hours, 5 cycles
Result: Rating 10, per ASTM D714 for blistering
Rating 9 per ASTM D1654 for corrosion

Direct Impact Resistance:
Method: ASTM D2794
Result: >160 in. lb

Dry Heat Resistance:
Method: ASTM D2485
Result: 250°F

Flexibility:
Method: ASTM D522, 180° bend, 1/8" mandrel
Result: Passes

Humidity Resistance*:
Method: ASTM D4585, 1500 hours
Result: Rating 10 per ASTM D714 for blistering
Rating 10 per ASTM D1654 for corrosion

Pencil Hardness:
Method: ASTM D3363
Result: 2B

Salt Fog Resistance*:
Method: ASTM B117, 1500 hours
Result: Rating 10 per ASTM D714 for blistering
Rating 9 per ASTM D1654 for corrosion

Thermal Cycling:
Method: ASTM D2246, 5 cycles
Result: Passes

*over Pro Industrial Pro-Cryl Primer

continued on back

PRO INDUSTRIAL™ ACRYLIC

SHERWIN-WILLIAMS

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Primer recommended for best performance.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Concrete and Masonry - For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI 03732, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F before filling. If required for a smoother finish, use the recommended filler/surfacer. The filler/surfacer must be thoroughly dry before topcoating per manufacturer's recommendations.

Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood - Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

CAUTIONS

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. FOR PROFESSIONAL USE ONLY. SEE MATERIAL SAFETY DATA SHEET.**

HOTW 4/15/2014 B66W00611 10 0

APPLICATION

Refer to the MSDS before use.

Temperature: 50°F minimum
120°F maximum
(Air, surface, and material)
At least 5°F above dew point

Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer Water

Airless Spray
Pressure .....1500 psi
Hose ..... 1/4" ID
Tip ..... .017" - .021"
Filter ..... 60 mesh
Reduction .....Not recommended

Conventional Spray
Gun ..... Binks 95
Fluid Nozzle..... 66
Air Nozzle 63PB
Atomization Pressure .....50 psi
Fluid Pressure ..... 15-20 psi
Reduction..... As needed up to 12½%by volume

Brush ..... Nylon / polyester
Reduction .....Not recommended
Roller .....3/8" woven
Reduction .....Not recommended

If specific application equipment is listed above, equivalent equipment may be substituted.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

NOTE: If coating is allowed to "set-up", Reducer #54 may be required for cleaning. Follow manufacturer's safety recommendations when using Reducer #54.

Protective & Marine Coatings

DTM BONDING PRIMER

B66A50

Revised: January 15, 2015

PRODUCT INFORMATION

1.22

PRODUCT DESCRIPTION

DTM BONDING PRIMER is a waterborne, acrylic emulsion, adhesion-promoting bonding primer. Designed to be part of a system for coating pre-finished metal siding (such as those containing Fluorocarbon [Kynar], Silicone Polyester, or Polyester Polymers), or other hard, slick, glossy surfaces, and previously painted surfaces.

- Must be topcoated
- Low odor, low VOC
- Oustanding application characteristics

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Off White
Volume Solids:	42% ± 2%
Weight Solids:	57% ± 2%
VOC (EPA Method 24):	<100 g/L; 0.83 lb/gal

Recommended Spreading Rate per coat:

	Minimum		Maximum	
Wet mils (microns)	**5.0**	125	**12.0**	300
Dry mils (microns)	**2.0**	50	**5.0**	125
~Coverage sq ft/gal (m^2/L)	**135**	3.3	**335**	8.2
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**672**	16.46		

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 8.0 mils wet (200 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	40 minutes	20 minutes
To handle:	6 hours	4 hours	2 hours
To recoat:	8 hours	4 hours	2 hours
To cure:	7 days	4 days	3 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), PMCC, mixed
Reducer/Clean Up:	Water

RECOMMENDED USES

For use over prepared:

Pre-Finished Siding such as:
- Fluorocarbons (Kynar)
- Polyester Polymers
- Silicone Polyester
- Previously painted surfaces.
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities.

PERFORMANCE CHARACTERISTICS

Substrate*: Prefinished siding
Surface Preparation*: SSPC-SP1
System Tested*:
1 ct. DTM Bonding Primer @ 3.0 mils (75 microns)
*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	325 psi
Direct Impact Resistance	ASTM D2794	160 in. lbs.
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 500 hours	Excellent
Pencil Hardness	ASTM D3363	3B
Salt Fog Resistance	ASTM B117, 1000 hours	Excellent
Thermal Shock	ASTM D2246, 15 cycles	Passes

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Protective & Marine Coatings

DTM BONDING PRIMER

B66A50

Revised: January 15, 2015

PRODUCT INFORMATION

1.22

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Prefinished Siding:			
Fluorocarbon, Silicon Polyester, or Polyester Polymers			
1 ct.	DTM Bonding Primer	2.0-5.0	(50-125)
	Pro Industrial DTM Acrylic Coating	2.5-4.0	(63-100)
or	Bond-Plex WB Acrylic		
or	DTM Primer/Finish		
or	Fast Clad HB Acrylic		
or	HydroGloss		
or	Metalatex Semi-Gloss		
or	Pro Industrial Acrylic		
or	Pro Industrial Multi-Surface Acrylic		
or	Sher-Cryl HPA		
Previously Painted Hard, Slick or Glossy Surfaces:			
1 ct.	DTM Bonding Primer	2.0-5.0	(50-125)
2 cts.	Pro Industrial DTM Acrylic Coating	2.5-4.0	(63-100)
or	Bond-Plex WB Acrylic		
or	DTM Primer/Finish		
or	Fast Clad HB Acrylic		
or	HydroGloss		
or	Metalatex Semi-Gloss		
or	Pro Industrial Acrylic		
or	Pro Industrial Multi-Surface Acrylic		
or	Sher-Cryl HPA		

Always check for compatibility of the previously painted surface with the new coating by appying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Prefinished Siding: SSPC-SP1

Previously Painted: SSPC-SP1

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 (3.78L) and 5 (18.9L) gallon containers
Weight per gallon:	11.2 ± 0.2 lb 1.34 Kg/L

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

DTM BONDING PRIMER

B66A50

Revised: January 15, 2015

APPLICATION BULLETIN

1.22

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Pre-Finished Siding:
(Fluorocarbon, Silicone Polyester, and Polyester Polymers)
Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72 (caution: excessive blasting pressure may cause warping, use caution). Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

Previously Painted Surfaces:
Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72 (caution: excessive blasting pressure may cause warping, use caution). Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up: .....Water

Airless Spray
- Pressure.....2400 psi
- Hose.....1/4" - 3/8" ID
- Tip .....017" - .019"
- Filter .....60 mesh
- Reduction.....As needed up to 12-1/2% by volume

Conventional Spray
- Gun .....Binks 95
- Fluid Nozzle 66
- Air Nozzle.....63PB
- Atomization Pressure.....60 psi
- Fluid Pressure.....25 psi
- Reduction.....As needed up to 12-1/2% by volume

Brush
- Brush.....Nylon/Polyester
- Reduction.....Not recommended

Roller
- Cover .....3/8" woven solvent resistant core
- Reduction.....Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

DTM BONDING PRIMER

B66A50

Revised: January 15, 2015

APPLICATION BULLETIN

1.22

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum		Maximum	
Wet mils (microns)	**5.0**	125	**12.0**	300
Dry mils (microns)	**2.0**	50	**5.0**	125
~Coverage sq ft/gal (m^2/L)	**135**	3.3	**335**	8.2
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**672**	16.46		

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 8.0 mils wet (200 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	40 minutes	20 minutes
To handle:	6 hours	4 hours	2 hours
To recoat:	8 hours	4 hours	2 hours
To cure:	7 days	4 days	3 days

Drying time is temperature, humidity, and film thickness dependent.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

DTM Bonding Primer is extremely sensitive to hydrocarbon containing solvents. When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent, followed by a water rinse. Do not use hydrocarbon containing solvents.

Product must be topcoated.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Do not use hydrocarbon solvents for cleaning.

Always check for compatibility of the previously painted surface with the new coating by appying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

MACROPOXY® 646 FAST CURE EPOXY

PART A	B58-600	SERIES
PART B	B58V600	HARDENER

Revised: March 9, 2015

PRODUCT INFORMATION

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PRODUCT DESCRIPTION

MACROPOXY 646 FAST CURE EPOXY is a high solids, high build, fast drying, polyamide epoxy designed to protect steel and concrete in industrial exposures. Ideal for maintenance painting and fabrication shop applications. The high solids content ensures adequate protection of sharp edges, corners, and welds. This product can be applied directly to marginally prepared steel surfaces.

- Low VOC
- Low odor
- Chemical resistant
- Abrasion resistant
- Outstanding application properties
- Meets Class A requirements for Slip Coefficient, 0.36 @ 6 mils / 150 microns dft (Mill White only)

PRODUCT CHARACTERISTICS

Finish:	Semi-Gloss
Color:	Mill White, Black and a wide range of colors available through tinting
Volume Solids:	72% ± 2%, mixed, Mill White
Weight Solids:	85% ± 2%, mixed, Mill White
VOC (EPA Method 24): mixed	Unreduced: <250 g/L; 2.08 lb/gal Reduced 10%: <300 g/L; 2.50 lb/gal
Mix Ratio:	1:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**7.0** (175)	**13.5** (338)
Dry mils (microns)	**5.0*** (125)	**10.0*** (250)
~Coverage sq ft/gal (m^2/L)	**116** (2.8)	**232** (5.7)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1152** (28.2)	

***May be applied at 3.0-10.0 mils (75-250 microns) dft as an intermediate coat in a multi-coat system. Refer to Recommended Systems (page 2). See Performance Tips section also.**

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	4-5 hours	2 hours	1.5 hours
To handle:	48 hours	8 hours	4.5 hours
To recoat:			
minimum:	48 hours	8 hours	4.5 hours
maximum:	1 year	1 year	1 year
To cure:			
Service:	10 days	7 days	4 days
Immersion:	14 days	7 days	4 days

If maximum recoat time is exceeded, abrade surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.
Paint temperature must be at least 40°F (4.5°C) minimum.

Pot Life:	10 hours	4 hours	2 hours
Sweat-in-time:	30 minutes	30 minutes	15 minutes

When used as an intermediate coat as part of a multi-coat system:

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	3 hours	1 hour	1 hour
To handle:	48 hours	4 hours	2 hours
To recoat:			
minimum:	16 hours	4 hours	2 hours
maximum:	1 year	1 year	1 year

PRODUCT CHARACTERISTICS (CONT'D)

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 110°F (43°C).
Flash Point:	91°F (33°C), TCC, mixed
Reducer/Clean Up:	Reducer, R7K15
In California:	Reducer R7K111 or Oxsol 100

PERFORMANCE CHARACTERISTICS

Substrate*: Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*:
1 ct. Macropoxy 646 Fast Cure @ 6.0 mils (150 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	84 mg loss
Accelerated Weathering-QUV[1]	ASTM D4587, QUV-A, 12,000 hours	Passes
Adhesion	ASTM D4541	1,037 psi
Corrosion Weathering[1]	ASTM D5894, 36 cycles, 12,000 hours	Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 per rusting
Nuclear Decontamination	ASTM D4256/ANSI N 5.12	99% Water Wash; 95% Overall
Direct Impact Resistance[2]	ASTM D2794	120 in. lb.
Dry Heat Resistance	ASTM D2485	250°F (121°C)
Exterior Durability	1 year at 45° South	Excellent, chalks
Flexibility	ASTM D522, 180° bend, 3/4" mandrel	Passes
Fuel Contribution	NFPA 259	5764 btu/lb
Humidity Resistance	ASTM D4585, 6000 hours	No blistering, cracking, or rusting
Immersion	1 year fresh and salt water	Passes, no rusting, blistering, or loss of adhesion
Radiation Tolerance	ASTM D4082 / ANSI 5.12	Pass at 21 mils (525 microns)
Pencil Hardness	ASTM D3363	3H
Salt Fog Resistance[1]	ASTM B117, 6,500 hours	Rating 10 per ASTM D610 for rusting; Rating 9 per ASTM D1654 for corrosion
Slip Coefficient, Mill White*	AISC Specification for Structural Joints Using ASTM A325 or ASTM A490 Bolts	Class A, 0.36
Surface Burning	ASTM E84/NFPA 255	Flame Spread Index 20; Smoke Development Index 35 (at 18 mils or 450 microns)
Water Vapor Permeance	ASTM D1653, Method B	1.16 US perms

Epoxy coatings may darken or discolor following application and curing.

*Refer to Slip Certification document

Footnotes:
[1] *Zinc Clad II Plus Primer*
[2] *Two coats of* Macropoxy 646 Fast Cure Epoxy

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Protective & Marine Coatings

MACROPOXY® 646 FAST CURE EPOXY

PART A B58-600 SERIES
PART B B58V600 HARDENER

Revised: March 9, 2015

PRODUCT INFORMATION

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RECOMMENDED USES

- Marine applications
- Fabrication shops
- Pulp and paper mills
- Power plants
- Offshore platforms
- Nuclear Power Plants
- Nuclear fabrication shops
- Refineries
- Chemical plants
- Tank exteriors
- Water treatment plants
- DOE Nuclear Fuel Facilities
- DOE Nuclear Weapons Facilities
- Mill White and Black are acceptable for immersion use for salt water and fresh water, not acceptable for potable water
- Suitable for use in USDA inspected facilities
- Acceptable for use in Canadian Food Processing facilities, categories: D1, D2, D3 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)
- Conforms to AWWA D102 OCS #5
- Conforms to MPI # 108
- This product meets specific design requirements for non-safety related nuclear plant applications in Level II, III and Balance of Plant, and DOE nuclear facilities*.

* Nuclear qualifications are NRC license specific to the facility.

- Suitable for use in the Mining & Minerals Industry

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Immersion and atmospheric:			
Steel:			
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
Concrete/Masonry, smooth:			
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
Concrete Block:			
1 ct.	Kem Cati-Coat HS Epoxy Filler/Sealer *as needed to fill voids and provide a continuous substrate.*	10.0-20.0	(250-500)
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
Atmospheric:			
Steel: (Shop applied system, new construction, AWWA D102, can also be used at 3 mils / 75 microns minimum dft when used as an intermediate coat as part of a multi-coat system)			
1 ct.	Macropoxy 646 Fast Cure Epoxy	3.0-6.0	(75-150)
1-2 cts.	of recommended topcoat		
Steel:			
1 ct.	Recoatable Epoxy Primer	4.0-6.0	(100-150)
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
Steel:			
1 ct.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 Polyurethane	3.0-6.0	(75-150)
or	Hi-Solids Polyurethane	3.0-5.0	(75-125)
or	SherThane 2K Urethane	2.0-4.0	(50-100)
or	Hydrogloss	2.0-4.0	(50-100)
Steel:			
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
1-2 cts.	Tile-Clad HS Epoxy	2.5-4.0	(63-100)
Steel:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
or	Zinc Clad IV	3.0-5.0	(75-125)
1 ct.	Macropoxy 646 Fast Cure Epoxy	3.0-10.0	(75-250)
1-2 cts.	Acrolon 218 Polyurethane	3.0-6.0	(75-150)
Aluminum:			
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
Galvanizing:			
2 cts.	Macropoxy 646 Fast Cure Epoxy	5.0-10.0	(125-250)
FIRETEX ONLY:			
Steel & Galvanized Substrates being primed for FIRETEX only:			
1 ct.	Macropoxy 646 Fast Cure Epoxy	2.0-5.0	(50-125)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel

Atmospheric:	SSPC-SP2/3
Immersion:	SSPC-SP10/NACE 2, 2-3 mil (50-75 micron) profile
Aluminum:	SSPC-SP1
Galvanizing:	SSPC-SP1; See Surface Preparations section on page 3 for application of FIRETEX intumescent coating systems

Concrete & Masonry

Atmospheric:	SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3
Immersion:	SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R, CSP 2-4

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Tint Part A with Maxitoners at 150% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Tinting is not recommended for immersion service.

APPLICATION CONDITIONS

Temperature:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

Part A:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Part B:	1 gallon (3.78L) and 5 gallon (18.9L) containers

Weight: 12.9 ± 0.2 lb/gal ; 1.55 Kg/L mixed, may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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Protective & Marine Coatings

MACROPOXY® 646 FAST CURE EPOXY

PART A	B58-600	SERIES
PART B	B58V600	HARDENER

Revised: March 9, 2015

APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel, Atmospheric Service:
Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs.

Iron & Steel, Immersion Service:
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2-3 mils / 50-75 microns). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.
In preparing galvanized steel substrates for the application of FIRETEX intumescent coating systems, Surface Preparation Specification SSPC-SP 16 must be followed obtaining a surface profile of minimum 1.5 mils (38 microns). Optimum surface profile will not exceed 2.0 mils (50 microns).

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910.

Concrete, Immersion Service:
For surface preparation, refer to SSPC-SP13/NACE 6, Section 4.3.1 or 1.3.2 or ICRI No. 310.2R, CSP 2-4.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up .....Reducer R7K15
In California.....Reducer R7K111

Airless Spray
Pump.....30:1
Pressure.....2800 - 3000 psi
Hose.....1/4" ID
Tip .....017" - .023"
Filter .....60 mesh
Reduction.....As needed up to 10% by volume

Conventional Spray
Gun .....DeVilbiss MBC-510
Fluid Tip .....E
Air Nozzle.....704
Atomization Pressure.....60-65 psi
Fluid Pressure.....10-20 psi
Reduction.....As needed up to 10% by volume
Requires oil and moisture separators

Brush
Brush.....Nylon/Polyester or Natural Bristle
Reduction.....As needed up to 10% by volume

Roller
Cover .....3/8" woven with solvent resistant core
Reduction.....As needed up to 10% by volume

Plural Component Spray ...Acceptable
Refer to April 2010 Technical Bulletin - "Application Guidelines for Macropoxy 646 Fast Cure Epoxy & Recoatable Epoxy Primer Utilizing Plural Component Equipment"
If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

MACROPOXY® 646 FAST CURE EPOXY

PART A	B58-600	SERIES
PART B	B58V600	HARDENER

Revised: March 9, 2015

APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine one part by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated prior to application. Re-stir before using.

If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**7.0** (175)	**13.5** (338)
Dry mils (microns)	**5.0*** (125)	**10.0*** (250)
~Coverage sq ft/gal (m^2/L)	**116** (2.8)	**232** (5.7)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1152** (28.2)	

***May be applied at 3.0-10.0 mils (75-250 microns) dft in atmospheric conditions. Refer to Recommended Systems (page 2). See Performance Tips section also.**

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet (175 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	4-5 hours	2 hours	1.5 hours
To handle:	48 hours	8 hours	4.5 hours
To recoat:			
minimum:	48 hours	8 hours	4.5 hours
maximum:	1 year	1 year	1 year
To cure:			
Service:	10 days	7 days	4 days
Immersion:	14 days	7 days	4 days

If maximum recoat time is exceeded, abrade surface before recoating.

Drying time is temperature, humidity, and film thickness dependent.

Paint temperature must be at least 40°F (4.5°C) minimum.

Pot Life:	10 hours	4 hours	2 hours
Sweat-in-time:	30 minutes	30 minutes	15 minutes

When used as an intermediate coat as part of a multi-coat system:

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	3 hours	1 hour	1 hour
To handle:	48 hours	4 hours	2 hours
To recoat:			
minimum:	16 hours	4 hours	2 hours
maximum:	1 year	1 year	1 year

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer R7K15. Clean tools immediately after use with Reducer R7K15. In California use Reducer R7K111. Follow manufacturer's safety recommendations when using any solvent.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer R7K15. In California use Reducer R7K111.

Tinting is not recommended for immersion service.

Use only Mill White and Black for immersion service.

Insufficient ventilation, incomplete mixing, miscatalyzation, and external heaters may cause premature yellowing.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

Quik-Kick Epoxy Accelerator is acceptable for use. See data page 4.99 for details.

When coating over aluminum and galvanizing, recommended dft is 2-4 mils (50-100 microns).

Acceptable for Concrete Floors.

Can be used as a metalizing sealer. Consult Technical Bulletin - Sealers for Thermal Spray Metalizing, or your local Sherwin-Williams representative.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: September 5, 2014

PRODUCT INFORMATION

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PRODUCT DESCRIPTION

ACROLON 218 HS is a low VOC, polyester modified, aliphatic, acrylic polyurethane formulated specifically for in-shop applications. Also suitable for industrial applications. A fast drying, urethane that provides color and gloss retention for exterior exposure.

- Can be used directly over organic zinc rich primers (epoxy zinc primer and moisture cure urethane zinc primer)
- Color and gloss retention for exterior exposure
- Fast dry
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Gloss or Semi-Gloss
Color:	Wide range of colors available
Volume Solids:	65% ± 2%, mixed, may vary by color
Weight Solids:	78% ± 2%, mixed, may vary by color
VOC (EPA Method 24):	Unreduced: <300 g/L; 2.5 lb/gal
mixed	Reduced 10% with R7K15: <340 g/L; 2.8 lb/gal
mixed	Reduced 9% with MEK, R6K10: <340 g/L; 2.8 lb/gal
Mix Ratio:	6:1 by volume, 1 gallon or 5 gallon mixes premeasured components

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.5** (112.5)	**9.0** (225)
Dry mils (microns)	**3.0** (75)	**6.0** (150)
~Coverage sq ft/gal (m^2/L)	**175** (4.3)	**346** (8.5)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1040** (25.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	4 hours	30 minutes	20 minutes
To handle:	18 hours	6 hours	4 hours
To recoat:			
minimum:	18 hours	8 hours	6 hours
maximum:	3 months	3 months	3 months
To cure:	14 days	7 days	5 days
Pot Life: (reduced 5% with Reducer R7K15)	4 hours	2 hours	45 minutes
Sweat-in-Time:		None	

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.
Paint temperature must be at least 40°F (4.5°C) minimum.

Shelf Life:	Part A* - 36 months, unopened Part B - 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
*Aluminum (Part A, Rex # B65SW655) has a shelf life of 24 months.	
Flash Point:	55°F (13°C), Seta, mixed
Reducer/Clean Up:	
Spray:	Reducer R7K15, MEK R6K10, or R7K111
Brush / Roll:	Reducer #132, R7K132 or R7K111

RECOMMENDED USES

Specifically formulated for in-shop applications.
For use over prepared metal and masonry surfaces in industrial environments such as:

- Structural steel
- Rail cars and locomotives
- Conveyors
- Bridges
- Wind Towers - onshore and offshore
- Offshore platforms - exploration and production
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102 Outside Coating Systems #4 (OCS-4), #5 (OCS-5) & #6 (OCS-6)
- Acceptable for use in high performance architectural applications
- Acceptable for use over Stampede 1 and Stampede 1H Caulking
- A component of INFINITANK
- Over FIRETEX hydrocarbon systems
- Suitable for use in the Mining & Minerals Industry
- Tank exteriors
- Pipelines
- Ships

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:

1 ct. Macropoxy 646 @ 6.0 mils (150 microns) dft
1 ct. Acrolon 218 HS Gloss @ 4.0 mils (100 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance[1]	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	43 mg loss
Adhesion[3]	ASTM D4541	1976 psi
Corrosion Weathering[3]	ASTM D5894, 27 cycles, 9072 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering
Direct Impact Resistance[1]	ASTM D2794	50 in. lb.
Dry Heat Resistance[1]	ASTM D2485, Method A	200°F (93°C)
Flexibility[1]	ASTM D522, 180° bend, 1/8" mandrel	Passes
Humidity Resistance[2]	ASTM D4585, 100°F (38°C), 1500 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering
Pencil Hardness	ASTM D3363	3H
Salt Fog Resistance[3]	ASTM B117, 15,000 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering

Meets the requirements of SSPC Paint No. 36, Level 3 for white and light colors. Dark colors may require a clear coat.

Complies with ISO 12944-5 C5I and C5M requirements.

Footnotes:
[1] Finish coat only tested
[2] Primer — Zinc-Clad II Plus; Intermediate — Macropoxy 646; Finish — Acrolon 218 HS
[3] Primer — Zinc-Clad III HS

continued on back

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: September 5, 2014

PRODUCT INFORMATION

5.22

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel:			
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Zinc Clad II Plus	3.0-5.0	(75-125)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Zinc Clad IV	3.0-5.0	(75-125)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Corothane I-GalvaPac Zinc Primer	3.0-4.0	(75-100)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Epoxy Mastic Aluminum II	6.0	(150)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Recoatable Epoxy Primer	4.0-6.0	(100-150)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Concrete/Masonry:			
1 ct.	Kem Cati-Coat HS Epoxy Filler/Sealer	10.0-20.0	(250-500)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Aluminum/Galvanizing:			
1 ct.	DTM Wash Primer	0.7-1.3	(18-32)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
ISO 12944 C5M System:			
1 ct.	Zinc Clad III HS	3.0-5.0	(75-125)
1 ct.	Tower Guard Epoxy	5.0-11.5	(125-287.5)
1 ct.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)

FIRETEX ONLY:

Finish Coat for FIRETEX Hydrocarbon Systems:

1 ct. Acrolon 218 HS Polyurethane*

*Consult FIRETEX PFP Specialist for recommended dft range

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

* Iron & Steel: SSPC-SP6/NACE 3, 1-2 mil (25-50 micron) profile
* Galvanizing: SSPC-SP1
* Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3
* Primer required

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Tint Part A with Maxitoner Colorants.

- Extra white tints at 100% tint strength
- Ultradeep base tints at 150% tint strength

Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) mix:	5 gallon (18.9L) mix:
Part A:	.86 gal (3.25L)	4.29 gal (16.2L)
Part B: (premeasured components)	.14 gal (0.53L)	0.71 gal (2.7L)

Weight: 11.2 ± 0.2 lb/gal ; 1.3 Kg/L mixed, may vary with color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: September 5, 2014

APPLICATION BULLETIN

5.22

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (1-2 mils / 25-50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned or before flash rusting occurs. Primer required.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up:
Spray.....Reducer R7K15, MEK R6K10, or R7K111
Brush/Roll .....Reducer #132, R7K132, or R7K111
If reducer is used, reduce at time of catalyzation.

Airless Spray
Pressure.....2500 - 2800 psi
Hose.....3/8" ID
Tip .....013" - .017"
Filter.....60 mesh
Reduction.....As needed up to 10% by volume with R7K15 or R7K111, or up to 9% with MEK, R6K10*

Conventional Spray
Gun .....Binks 95
Cap 63P
Atomization Pressure.....50 - 70 psi
Fluid Pressure.....20 - 25 psi
Reduction.....As needed up to 10% by volume with R7K15 or R7K111, or up to 9% with MEK, R6K10*

Brush
Brush.....Natural Bristle
Reduction.....As needed up to 10% by volume*

Roller
Cover .....3/8" woven with solvent resistant core
Reduction.....As needed up to 10% by volume*

If specific application equipment is not listed above, equivalent equipment may be substituted.

* Note: Reducing more than maximum recommended level will result in VOC exceeding 340g/L

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Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: September 5, 2014

APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine six parts by volume of Part A with one part by volume of Part B (premeasured components). Thoroughly agitate the mixture with power agitation. Re-stir before using.

If reducer is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.5** (112.5)	**9.0** (225)
Dry mils (microns)	**3.0** (75)	**6.0** (150)
~Coverage sq ft/gal (m^2/L)	**175** (4.3)	**346** (8.5)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1040** (25.5)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	4 hours	30 minutes	20 minutes
To handle:	18 hours	6 hours	4 hours
To recoat:			
minimum:	18 hours	8 hours	6 hours
maximum:	3 months	3 months	3 months
To cure:	14 days	7 days	5 days
Pot Life: (reduced 5% with Reducer R7K15)	4 hours	2 hours	45 minutes
Sweat-in-Time:		None	

If maximum recoat time is exceeded, abrade surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.
Paint temperature must be at least 40°F (4.5°C) minimum.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #132, R7K132. Clean tools immediately after use with Reducer #132, R7K132. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #15, R7K15 or MEK, R6K10.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

Quick-Thane Urethane Accelerator is acceptable for use. See data page 5.97 for details.

E-Z Roll Urethane Defoamer is acceptable for use. See data page 5.99 for details.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

PRO INDUSTRIAL™

113.05

PRO-CRYL® UNIVERSAL PRIMER

B66-310 SERIES

As of 02/01/2014, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® 09 S	Yes
MPI#	Yes	NGBS	Yes

CHARACTERISTICS

Pro Industrial Pro-Cryl Universal Primer is an advanced technology, self cross-linking acrylic primer. It is rust inhibitive and designed for both construction and maintenance applications. It can be used as a primer under water-based or solvent-based high performance topcoats.

- Rust inhibitive
- Single component
- Early moisture resistant
- Fast dry
- Low temperature application 40°F
- Interior and exterior use
- Suitable for use in USDA inspected facilities

Color: Off White, Gray, Red Oxide

Recommended Spread Rate per coat:

Wet mils:	5.0 - 10.0
Dry mils:	2.0 - 4.0
~Coverage:	156 - 312 sq ft/gal approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Time @ 6.0 mils wet 50% RH:

	40°F	77°F	120°F
To touch:	2 hrs	40 min	20 min
Tack free:	8 hrs	2 hrs	1 hr
To recoat:	16 hrs	4 hrs	2 hrs
To cure:	45 days	30 days	14 days

Drying time is temperature, humidity, and film thickness dependent.

Finish: Low sheen

Flash Point: N/A

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting: Do not tint
B66W310 (may vary by color)

VOC (less exempt solvents):
96 g/L; 0.80 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12

Volume Solids: 36% ± 2%

Weight Solids: 49% ± 2%

Weight per Gallon: 10.2 lb

RECOMMENDED SYSTEMS

Waterborne topcoat:

1-2 cts.	Pro Industrial High Performance Acrylic
or	Pro Industrial Waterborne Catalyzed Epoxy
or	Pro Industrial Multi-Surface Acrylic
or	Pro Industrial Hi-Bild Waterbased Epoxy
or	Pro Industrial Pre-Catalyzed Epoxy

Solvent borne topcoat:

1-2 cts.	Pro Industrial High Performance Epoxy
or	Pro Industrial Urethane Alkyd

Pro Industrial Pro-Cryl Universal Primer B66W310 Off White is GREENGUARD GOLD certified for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
1 ct. Pro Industrial Pro-Cryl Universal Primer
1 ct. Pro Industrial High Performance Acrylic

Adhesion:
Method: ASTM D4541
Result: 500 psi

Corrosion Weathering:
Method: ASTM D5894, 10 cycles, 3360 hours
Result: Passes

Direct Impact Resistance:
Method: ASTM D2794
Result: >140 in. lbs.

Dry Heat Resistance*:
Method: ASTM D2485
Result: 200°F

Flexibility:
Method: ASTM D522, 180° bend, 1/4" mandrel
Result: Passes

Moisture Condensation Resistance:
Method: ASTM D4585, 100°F, 1250 hours
Result: Passes

Pencil Hardness:
Method: ASTM D3363
Result: H

Salt Fog Resistance:
Method: ASTM B117, 1250 hours
Result: Passes

Provides performance comparable to products formulated to federal specification: AA50557 and Paint Specification: SSPC-Paint 23.

*Suitable for intermittent dry heat resistance up to 300°F when used as a system with Sher-Cryl HPA

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PRO INDUSTRIAL™
PRO-CRYL® UNIVERSAL PRIMER

SHERWIN-WILLIAMS®

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Iron and Steel - Minimum surface preparation is Hand Tool Cleaning per SSPC-SP2. Remove all oil and grease from the surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

APPLICATION

Refer to the MSDS before using

Temperature: 40°F minimum
120°F maximum
(air, surface, and material)
At least 5°F above dew point

Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: Water

Airless Spray

Pressure ..... 2000 psi
Hose ..... 1/4" ID
Tip ..... .015" - .019"
Filter ..... 60 mesh
Reduction ..... Not recommended

Conventional Spray

Gun ..... Binks 95
Fluid Nozzle 66
Air Nozzle 63PB
Atomization Pressure ..... 60 psi
Fluid Pressure ..... 25 psi
Reduction As needed up to 5% by volume

Brush ..... Nylon/Polyester
Reduction ..... Not recommended

Roller ..... 3/8" woven
Reduction As needed up to 5% by volume

If specific application equipment is listed above, equivalent equipment may be substituted.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

HOTW 02/17/2014 B66W310 32 96

SHERWIN WILLIAMS.

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

101.86

SOLO®

100% Acrylic Interior/Exterior Flat A74 Series

As of 03/29/2014, Complies with:			
OTC	Yes	LEED® 09CI	Yes
SCAQMD	Yes	LEED® 09NC	Yes
CARB	Yes	LEED® 09CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Solo 100% Acrylic Interior/Exterior creates a hard, scrubbable finish that is resistant to burnishing, wearing, and blocking. **Solo** is excellent choice for specifications where 100% acrylic interior finishes are required. **Solo** is designed for use on doors, trim, walls, & shutters. **Solo** can be applied to surfaces with a pH up to 13.

Colors: Most colors
To optimize hide and color development, always use the recommended P-Shade primer
Coverage: 350-400 sq ft/gal @ 4.0 mils wet; 1.7 mils dry
Drying Time, @ 77°F, 50% RH:
Touch: 1 hour
Recoat: 4 hours
Drying and recoat times are temperature, humidity, and film thickness dependent.
Flash Point: N/A
Finish: 0-5 units @ 85°
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-6	100%
Deep Base	4-12	100%
Ultradeep	10-12	100%

Vehicle Type: 100% Acrylic
Extra White A74W00051
VOC (less exempt solvents):
<50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 40 ± 2%
Weight Solids: 54 ± 2%
Weight per Gallon: 11.1 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

Apply 2 topcoats of Solo directly over existing properly prepared, interior or exterior coatings, or new interior bare drywall, plaster (cured with a pH of less than 13), masonry (cured with a pH of less than 13) and non-bleeding wood.

Interior
Drywall
Self-prime using 2 cts. of Solo, or
1 ct. ProMar 200 Zero VOC Primer
Plaster
Self-prime using 2 cts. of Solo, or
1 ct. Premium Wall & Wood Primer
Wood
Self-prime using 2 cts. of Solo, or
1 ct. Premium Wall & Wood Primer

Interior & Exterior
Aluminum & Galvanized Steel
(if needed)
1 ct. Pro Industrial Pro-Cryl Primer
Block
1 ct. PrepRite Block Filler
Masonry, Cement, Stucco
1 ct. Loxon Concrete & Masonry Primer
Steel
1 ct. Pro Industrial Pro-Cryl Primer

Exterior
Wood, Composition Board
1 ct. Exterior Oil-Based Wood Primer
or Exterior Latex Wood Primer
Plywood
1 ct. Exterior Latex Wood Primer

Other primers may be appropriate.

When repainting involves a drastic color change, a coat of primer will improve the hiding performance of the topcoat color.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer.

Aluminum and Galvanized Steel
Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, steel wool, or other abrading method.

Drywall
Fill cracks and holes with patching paste/ spackle and sand smooth. Joint compounds must be cured and sanded smooth. Remove all sanding dust.

Masonry, Concrete, Block
All new surfaces must be cured at least 7 days. Remove all form release and curing agents. Rough surfaces can be filled to provide a smooth surface. Repair cracks, voids, and other holes with an elastomeric patch or sealant.

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101.86

SOLO®

100% Acrylic
Interior/Exterior
Flat
A74 Series

SURFACE PREPARATION

Plaster
All new surfaces must be cured at least 7 days. Textured, soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with clear water and allow to dry.

Steel
Rust and mill scale must be removed using sandpaper, steel wool, or other abrading method. Bare steel must be primed the same day as cleaned.

Vinyl
Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly.

Wood
Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Caulking
Gaps between walls, ceilings, crown moldings, and other interior trim can be filled with the appropriate caulk after priming the surface.

APPLICATION

Apply at temperatures above 50°F.
No reduction needed.
Brush
Use a nylon/polyester brush.
Roller
Use a 3/8" - 3/4" nap synthetic cover.
Spray—Airless
Pressure..... 2000 psi
Tip..... .015"-.021"
Reduction.....Up to 1 pint per gallon

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

Non-photochemically reactive.
Protect from freezing.

Label Caution
CAUTION contains CRYSTALLINE SILICA. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.
HOTW 03/29/2014 A74W00051 10 25

Protective & Marine Coatings

GALVITE™ HS

B50WZ30

Revised January 15, 2015

PRODUCT INFORMATION

1.30

PRODUCT DESCRIPTION

GALVITE HS is a low VOC solvent based alkyd modified acrylic coating. It is intended for use in mild industrial and commercial environments. It may be used untopcoated or topcoated with select waterborne or solvent based coatings.

- Excellent adhesion to galvanized and aluminum surfaces
- High light reflectance
- Early moisture resistance
- Good acid and alkali resistance

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Off White
Volume Solids:	63% ± 2%
Weight Solids:	81% ± 2%
VOC (EPA Method 24):	Unreduced: <340 g/L; 2.80 lb/gal Reduced 3%: <340 g/L; 2.80 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**5.0** (125)	**7.0** (175)
Dry mils (microns)	**3.0** (75)	**4.5** (112)
~Coverage sq ft/gal (m^2/L)	**225** (5.5)	**336** (8.2)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**1008** (24.7)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	8-10 hours	1 hour	15 minutes
To handle:	16 hours	3 hours	30 minutes
To recoat:	24 hours	4.5 hours	1 hours
To cure:	21 days	14 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	>100°F (38°C), Seta
Reducer/Clean Up: Below 80°F (27°C): Above 80°F (27°C):	 Xylene, R2K4 Aromatic Hi-Flash Naphtha, R2K5

RECOMMENDED USES

For use over prepared:

- Galvanized steel
- Primed ferrous metal
- Aluminum
- Galvalume
- Zinc rich primers

Examples:

- Joists
- Metal deck ceiling
- Railings
- Ducts
- Conduit

PERFORMANCE CHARACTERISTICS

Substrate*: Galvanized Steel

Surface Preparation*: SSPC-SP1

System Tested*:

1 ct. Galvite HS @ 3.0 mils (75 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1kg load	265 mg loss
Adhesion	ASTM D4541	325 psi
Direct Impact Resistance	ASTM D2794	80 in. lbs.
Dry Heat Resistance	ASTM D2485	275°F (135°C)
Exterior Durability	1 year, 45° South	Excellent
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 500 hours	Good-Excellent
Pencil Hardness	ASTM D3363	5B
Salt Fog Resistance	ASTM B117, 500 hours	Fair
Thermal Shock	ASTM D2246, 15 cycles	Passes

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Protective & Marine Coatings

GALVITE™ HS

B50WZ30

Revised January 15, 2015

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Galvanized Metal or Aluminum, interior:			
1-2 cts.	Galvite HS	3.0-4.5	(75-112)
Galvanized Metal or Aluminum, exterior:			
2 cts.	Galvite HS	3.0-4.5	(75-112)
Galvanized Metal or Aluminum:			
1 ct.	Galvite HS	3.0-4.5	(75-112)
2 cts.	Industrial Enamel HS	2.0-4.0	(50-100)
or	Dry Fall Paints		
Galvanized Metal or Aluminum:			
1 ct	Galvite HS	3.0-4.5	(75-112)
2 cts.	Pro Industrial DTM Acrylic Coating	2.5-4.0	(63-100)
or	Metalatex Semi-Gloss Enamel	1.5-4.0	(38-100)
Galvanized, Rusted:			
1 ct.	Kem Bond HS (spot prime rusted areas only)	3.0-5.0	(75-125)
1-2 cts.	Galvite HS	3.0-4.5	(75-112)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

	Galvanizing:	SSPC-SP1
*	Rusted Galvanizing:	SSPC-SP2
	Aluminum	SSPC-SP1

* Primer required

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint when used as a topcoat.

For tinting as a guide coat prior to topcoating, do not exceed ½ oz. Nuodex 844 Colorant per gallon.

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 100°F (38°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	13.41 ± 0.2 lb/gl 1.6 kg/L

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

Protective & Marine Coatings

GALVITE™ HS

B50WZ30

Revised January 15, 2015

APPLICATION BULLETIN

1.30

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

New Galvanized Metal
Allow to weather a minimum of 6 months prior to coating. Remove grease, oil, dirt, soil, drawing compounds, and other contaminants by use of solvents, emulsions, cleaning compounds, or steam cleaning per SSPC-SP1. If weathering is not possible or if the metal has been treated with chromates or silicates, first solvent clean per SSPC-SP1 and apply a test patch (minimum area of 2 sq ft) and allow the paint to dry for at least one week before testing adhesion. If adhesion is unacceptable, Brush-Off Blasting per SSPC-SP7 or NACE 4 is required to remove these treatments.

Old Galvanized Metal
If metal is covered with a white powder (white rust) and there is little or no rusting, Solvent Clean per SSPC-SP1. If zinc surface has weathered away and general rusting is taking place, Hand Tool Clean per SSPC-SP2, and spot prime only the rusted areas with Kem Bond HS Primer.

Factory Finished Interior Metal Roof Deck
This surface may be hard and slick and prohibit adequate adhesion. Spot test. Solvent Clean per SSPC-SP1 and apply a test patch of Galvite HS. Allow paint to dry at least one week before testing adhesion. Be sure decking manufacturer certifies it is paintable. If adhesion is poor, Hand Tool Clean per SSPC-SP2 or Brush Blast per SSPC-SP7.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning SSPC-SP1.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 100°F (38°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up
Below 80°F (27°C)..... Xylene, R2K4
Above 80°F (27°C).....Aromatic Hi-Flash Naphtha, R2K5

Airless Spray
Pressure.....2400 psi
Hose.....1/4" ID
Tip .....015"
Filter.....60 mesh
Reduction.....As needed up to 3% by volume

Conventional Spray
Gun .....Binks 95
Fluid Nozzle 63A
Air Nozzle.....63PB
Atomization Pressure.....50 psi
Fluid Pressure.....15 psi
Reduction.....As needed up to 3% by volume

Brush
Brush.....Nylon / polyester or natural bristle
Reduction.....Not recommended

Roller
Cover .....3/8" nap synthetic or lambs wool
Reduction.....Not recommended

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

GALVITE™ HS

B50WZ30

Revised January 15, 2015

APPLICATION BULLETIN

1.30

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**5.0** (125)	**7.0** (175)
Dry mils (microns)	**3.0** (75)	**4.5** (112)
~Coverage sq ft/gal (m^2/L)	**225** (5.5)	**336** (8.2)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**1008** (24.7)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	8-10 hours	1 hour	15 minutes
To handle:	16 hours	3 hours	30 minutes
To recoat:	24 hours	4.5 hours	1 hours
To cure:	21 days	14 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Aromatic Hi-Flash Naphtha, R2K5. Clean tools immediately after use with Aromatic Hi-Flash Naphtha, R2K5. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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PRO INDUSTRIAL

113.06

DTM ACRYLIC EG-SHEL

B66W01251 Extra White
B66W01253 Deep Base
B66T01254 Ultradeep

As of 12/22/2014, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® 09 S	Yes
MPI	Yes	NGBS	Yes

CHARACTERISTICS

Pro Industrial DTM Acrylic coating is an interior/exterior, water based, corrosion resistant acrylic coating for light to moderate industrial use. Designed for new construction or maintenance use and can be used directly over prepared substrates.

- Chemical resistant
- Corrosion resistant
- Fast dry
- Flash rust/early rust resistant
- Suitable for use in USDA inspected facilities

Color: most colors

Recommended Spread Rate per coat:

Wet mils:	6.0 - 9.5
Dry mils:	2.5 - 4.0
Coverage:	170 - 275 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Time @ 6.0 mils wet 50% RH:

	@ 50°F	@ 77°F	@ 110°F
To touch:	1 hr	20 min	10 min
Tack free:	2 hrs	45 min	30 min
To recoat:	2 hrs	1 hr	1 hr

Drying time is temperature, humidity, and film thickness dependent.

Finish: Eg-Shel

Flash Point: N/A

Shelf Life: 36 months, unopened
Store indoors at 40°F to 100°F.

Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-6	100%
Deep Base	6-12	100%
Ultradeep	10-12	100%

Extra White B66W01251
(may vary by color)

VOC (less exempt solvents): Unreduced: <50 g/L; 0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12

Volume Solids: 42 ± 2%

Weight Solids: 55 ± 2%

Weight per Gallon: 10.61 lb/gal ±2%

RECOMMENDED SYSTEMS

Steel*:
2 cts. Pro Industrial DTM Acrylic

Steel:
1 ct. Pro Industrial Pro-Cryl Primer or DTM Primer/Finish
1-2 cts. Pro Industrial DTM Acrylic

Aluminum:
1-2 cts. Pro Industrial DTM Acrylic

Concrete Block:
1 ct. Pro Industrial Heavy Duty Blockfiller
1-2 cts. Pro Industrial DTM Acrylic

Concrete/Masonry:
1 ct. Loxon Concrete & Masonry Primer
1-2 cts. Pro Industrial DTM Acrylic

Drywall
1 ct. ProMar 200 Primer
1-2 cts. Pro Industrial DTM Acrylic

Galvanizing:
2 cts. Pro Industrial DTM Acrylic

Prefinished Siding:(Baked-on finishes)
1 ct. DTM Bonding Primer
1-2 cts. Pro Industrial DTM Acrylic

Wood, Exterior:
1 ct. Exterior Wood Primer
1-2 cts. Pro Industrial DTM Acrylic

Wood, Interior:
1 ct. Premium Wall & Wood Primer
1-2 cts. Pro Industrial DTM Acrylic

*DeepBase and Ultradeep colors require a prime coat for maximum durability, adhesion, and corrosion protection. Application of coating on unprimed bare steel may cause pinpoint rusting.

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
Finish: Pro Industrial DTM Acrylic, B66W01251 – 2 cts @ 3.0 mils dft/ct

Adhesion:
Method: ASTM D4541
Result: > 500 psi

Corrosion Weathering:
Method: ASTM D5894, 1680 hours, 5 cycles
Result: Rating 9F, per ASTM D714 for blistering
Rating 9, per ASTM D1654 for corrosion

Direct Impact Resistance:
Method: ASTM D2794
Result: >160 in. lb

Dry Heat Resistance:
Method: ASTM D2485
Result: 300°F

Flexibility:
Method: ASTM D522, 180° bend, 1/8" mandrel
Result: Pass

Humidity Resistance:
Method: ASTM D4585, 1000 hours
Result: Rating 10 per ASTM D714 for blistering
Rating 10 per ASTM D1654 for corrosion

Pencil Hardness:
Method: ASTM D3363
Result: 6B, 7 day air dry

Salt Fog Resistance:
Method: ASTM B117, 500 hours
Result: Rating 8F per ASTM D714 for blistering
Rating 8 per ASTM D1654 for corrosion

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PRO INDUSTRIAL
DTM ACRYLIC EG-SHEL

SHERWIN-WILLIAMS.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (**NIOSH** approved) and proper containment and cleanup. For more information, call the National Lead Information Center at **1-800-424-LEAD** (in US) or contact your local health authority.

Do not use hydrocarbon solvents for cleaning.

Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Primer recommended for best performance.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Concrete and Masonry - For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI 03732, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F before filling. If required for a smoother finish, use the recommended filler/surfacer. The filler/surfacer must be thoroughly dry before topcoating per manufacturer's recommendations. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood - Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

LABEL CAUTIONS

Contains **CRYSTALLINE SILICA.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (**NIOSH** approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. FOR PROFESSIONAL USE ONLY. SEE MATERIAL SAFETY DATA SHEET.**

HOTW 12/22/2014 B66W01251 09 33 KOR, SP, FR

APPLICATION

Refer to the MSDS before using

Temperature: 50°F minimum
110°F maximum
(Air, surface, and material)
At least 5°F above dew point

Relative humidity: 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Airless Spray

Pressure..... 1500 psi
Hose..... 1/4" ID
Tip..... .017" - .021"
Filter..... 60 mesh
Reduction..... Not recommended

Conventional Spray

Gun..... Binks 95
Fluid Nozzle..... 66
Air Nozzle..... 63PB
Atomization Pressure..... 50 PSI
Fluid Pressure..... 10-20 PSI
Reduction..... Not recommended

Brush ..... Nylon / polyester
Reduction..... Not recommended
Due to this product's fast dry performance, brushing should be limited to small areas where a wet edge can be maintained

Roller ..... 1/4-3/8" woven
Reduction..... Not recommended
If specific application equipment is listed above, equivalent equipment may be substituted.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

UNIFLEX®
Fluid Applied Roofing Systems

500 PREMIUM ALUMINUM ROOF COATING

20-475

PRODUCT INFORMATION

PRODUCT DESCRIPTION

Uniflex® 500 Premium Aluminum Roof Coating is a premium-grade fibered aluminum reflective coating manufactured from the finest aluminum leafing pigments, quality refined asphalt, reinforcing fibers and petroleum distillates. The aluminum pigment exceeds Federal Specification TT-P-320D, Type II. Uniflex® 500 also meets performance standards as set forth in Federal Specifications TT-C-498C. Uniflex® 500 meets the composition requirements of ASTM D2824-85, Type III (non-asbestos).

RECOMMENDED USES

Uniflex® 500 Premium Aluminum Roof Coating provides a durable, reflective coating over most types of surfaces including metal, smooth built-up and modified bitumen roofs.

PRODUCT CHARACTERISTICS

Color.....Silver
Vehicle Base.....Asphalt
Weight per Gallon.....9.1 lbs.
Solids by Weight (ASTM 2369).....60 ± 2%
Solids by Volume.....44 ± 2%
Viscosity @ 77° F (25° C).....115 - 125 KU
Dry Film Thickness.....7.0 mils
(@ 1 gal./100 sq. ft. less surface absorption)
Dry Time
Exposure.....4 - 6 hours
Between Coats.....3 - 5 days
Specific Gravity.....1.093
VOC..... 435 ± 10 g/L
Flash Point (open cup).....105° F Min.
Solvent.....Mineral Spirits
Clean Up.....Mineral Spirits

Application Rate:
Apply each coat at a rate of 2 gallons per 100 sq. ft. (32 wet mils). See system specifications for more details.

PERFORMANCE CHARACTERISTICS

FM APPROVED

CLASSIFIED UL®

Uniflex®
101 Prospect Avenue
Cleveland, Ohio 44115

888-321-3539
www.uniflexroof.com

UNIFLEX®
Fluid Applied Roofing Systems

500 PREMIUM ALUMINUM ROOF COATING

20-475

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Metal .....2 gallons per 100 sq. ft.
Modified Bitumen .....1½ - 2 gallons per 100 sq. ft.
Built-Up.....2 - 3 gallons per 100 sq. ft.
(smooth, rolled roofing)

IMPORTANT: When spraying, multiple coats may be required to achieve coverage of 2 - 3 gallons per 100 square feet. When rolling/brushing, multiple coats may be required to achieve coverage of 1.5 - 3 gallons per 100 square feet.

SURFACE PREPARATION

Surface must be power washed to remove dirt, loose paint and rust, excessive chalk and other foreign matter which could prevent proper adhesion. Surface must be completely dry prior to coating.

IMPORTANT: Where ponding water conditions persist beyond 48 hours, roof drains or other corrective measures must be installed to eliminate water build-up prior to coating the roof.

APPLICATION CONDITIONS

Apply at temperatures over 50° F. Do not apply when rain is forecast. Allow 4 - 6 hours before exposing coating to rain, heavy dew or temperatures below 50° F.
KEEP FROM FREEZING.

Refer to product Application Bulletin for detailed application information.

PACKAGING

55 gallon drums (208.2 liters)
4.75 gallon pail (17.9 liters)

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Uniflex® representative for additional technical data and instructions.

KST020475

SMIS #	SIZE
992-1040	55 gal. drum
992-1032	5 gal. pail

WARRANTY

This product is manufactured of good materials and by competent workmen. Seller's and manufacturer's only obligation shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product for his/her intended use, and user assumes all risk and liability.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of KST Coatings – A Business Unit of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Uniflex® representative to obtain the most recent Product Data Information and Application Bulletin.

The information on this data sheet is effective as of the listed revision date and supersedes all previous information.

Uniflex®
101 Prospect Avenue
Cleveland, Ohio 44115

888-321-3539
www.uniflexroof.com

UNIFLEX®
Fluid Applied Roofing Systems

500 PREMIUM ALUMINUM ROOF COATING

20-475

APPLICATION BULLETIN

SURFACE PREPARATION

Surface must be power washed (minimum 2,000 psi) to remove dirt, loose paint and rust, excessive chalk and other foreign matter which could prevent proper adhesion. Surface must be completely dry prior to coating.

Previously Coated Surfaces: Any surface preparation short of total removal of the old coating may compromise the service length of the system. Check for compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow one week to dry before testing adhesion per ASTM 3359. If the coating is incompatible, complete removal is required.

IMPORTANT: Where ponding water conditions persist beyond 48 hours, roof drains or other corrective measures must be installed to eliminate water build-up prior to coating the roof.

For the following substrates refer to system specification for detailed application procedures.

Metal Roofs: Refer to system specification. Remove all loose rust and prime areas where existing rust was cleaned using Uniflex® Rust Inhibitive Metal Primer (refer to data sheet #34-520). Replace loose and/or missing fasteners. Repair defective seams, small holes, flashings, around roof curbs and skylights with Uniflex® Seam Tape (refer to Seam Tape data sheet). Seam Tape must then be primed with Uniflex® Elastomeric prior to coating.

NOTE: New metal roofs contain residual oils from the manufacturing process of the panels. Allow the roof to weather six months before coating, remove all oil and grease by steam cleaning per SSPC-SP1.

Built-up and Modified Bitumen Roofs: Refer to system specification. Repair torn flashings, parapet walls, large blisters and surface breaks. Dried out asphalt roof surfaces may need to be primed using Black Asphalt Primer (refer to data sheet #20-412). Alligatored roofs require coating with Uniflex® Asphalt Emulsion (refer to data sheets #40-312 or 40-314).

NOTE: New asphalt or newly installed modified bitumen roofs should weather 30 - 90 days prior to application of Uniflex® 500 Premium Aluminum Roof Coating.

APPLICATION CONDITIONS

Apply at temperatures over 50° F. Do not apply when rain is forecast. Allow 4 - 6 hours before exposing coating to rain, heavy dew or temperatures below 50° F.
KEEP FROM FREEZING.

Refer to product Application Bulletin for detailed application information.

APPLICATION EQUIPMENT

Inspect preliminary work relating to substrate for problem areas to ensure all preparatory work has been properly completed.

Although formulated for a minimum of settling, Uniflex® 500 Premium Aluminum Roof Coating must be power mixed before and during application. This coating may be applied with roof brushes, roller or heavy-duty spray equipment. Spray equipment is recommended for metal roofs.

Airless Spray
- Pressure: 2,800 psi.
- Spray tip: Reversible, self-cleaning tip without diffuser pin. Size .035" with a fan angle of 60° (ex. 635).
- Hose Size: At 300' total hose length, use 250' of ¾" → 50' of ½" → 10' swivel whip end ⅜" hose.
- General: The longer the hose, the smaller the tip orifice size.

Brush/Roll
- Soft brushes or a ¾" - 1" nap roller may be used. (Roller/brush application may be difficult because of irregular surfaces and may also require multiple applications to obtain required thickness).

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500 PREMIUM ALUMINUM ROOF COATING

20-475

APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface Preparation must be completed as indicated.

Mixing Instructions: Coating must be thoroughly mixed before and during application.

Application Rate:
Apply each coat at a rate of 2 gallons per 100 sq. ft. (32 wet mils). See system specifications for more details.

Dry Time:
Exposure to rain or heavy dew: 4 - 6 hours.
Between Coats and before foot traffic: 3 - 5 days.
Drying time is temperature, humidity and film thickness dependent.

Clean Up: Mineral Spirits

DISCLAIMER

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CLEAN-UP INSTRUCTIONS

Inspect completed application and correct any defects. Manufacturer's representatives may inspect the completed roofing system and notify the Contractor of any defects in the application. Clean up all debris, excess materials and equipment and remove from site. Restrict traffic to only essential personnel. Provide appropriate protection against traffic and construction activities on completed roofs.

PERFORMANCE TIPS

- Coating must be thoroughly mixed before and during application.
- It is recommended that the coating installation be checked on regular maintenance schedule. Small area touch-up can be made at any time following recommended application procedures.
- Technical advice on use of material for specific application and end use requirements is available from the manufacturer. Material Safety Data Sheet (MSDS) should be consulted for further information. This product is for industrial and professional use only.
- Any discharge of fumes or possible contaminants must be noted. Contact Uniflex® to determine if fumes or matter being exhausted will interfere with adhesion.
- Note: Slope of roof area must not be less than ¼" per foot.

SAFETY PRECAUTION

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Uniflex® representative for additional technical data and instructions.

WARRANTY

This product is manufactured of good materials and by competent workmen. Seller's and manufacturer's only obligation shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product for his/her intended use, and user assumes all risk and liability.

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Protective & Marine Coatings

SILVER-BRITE® ALUMINUM PAINT

B59S11

Revised 12/11

PRODUCT INFORMATION

2.41

PRODUCT DESCRIPTION

SILVER-BRITE ALUMINUM PAINT is a superior quality, one package, interior/exterior, general purpose aluminum paint formulated with 325-mesh leafing aluminum pigment, petroleum resin, and select oils producing a chrome-like uniform appearance.

- For service temperatures up to 400°F (204°C)
- Resists discoloration
- Long term protection against weathering and moisture
- Brush, roll, or spray applications

PRODUCT CHARACTERISTICS

Finish:	Aluminum Sheen
Color:	Aluminum
Volume Solids:	42% ± 2%
Weight Solids:	52% ± 2%
VOC (EPA Method 24):	<450 g/L; 3.8 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**2.5** (63)	**3.5** (88)
Dry mils (microns)	**1.0** (25)	**1.5*** (40)*
~Coverage sq ft/gal (m^2/L)	**438** (10.7)	**658** (16.1)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**672** (16.5)	

***Critical**

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	4 hours	1-4 hours	30 minutes
Tack free:	8 hours	6-8 hours	2 hours
To recoat:	28 hours	24 hours	10 hours
To cure:	10 days	8 days	3 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	108°F (42°C), PMCC
Reducer:	Not recommended
Clean Up:	Mineral Spirits, R1K4

RECOMMENDED USES

For use over prepared steel surfaces in normal and high temperature (up to 400°F / 204°C) environments.

- Interior/exterior
- Piping
- Radiators
- Bridges
- Fences
- Metal built-up roofs
- Refineries
- Siding
- Storage tank exteriors
- Conforms to AWWA D102, OCS #1

PERFORMANCE CHARACTERISTICS

- Heat reflective
- Dry heat resistant to 400°F (204°C)
- Long term protection against weathering and moisture
- Ultraviolet light resistant
- Maintains "sheen"

Provides performance comparable to products formulated to specification: SSPC-Paint 101

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Protective & Marine Coatings

SILVER-BRITE® ALUMINUM PAINT

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PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel, 200°F (93°C)-400°F (204°C):			
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Steel, rusted, below 200°F (93°C):			
1 ct.	Kem Bond HS	2.0-5.0	(50-125)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Aluminum, below 200°F (93°C):			
1 ct.	DTM Wash Primer	0.7-1.3	(18-32)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Concrete, below 200°F (93°C):			
1 ct.	Heavy Duty Block Filler	10.0-18.0	(250-450)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Galvanized Metal, below 200°F (93°C):			
1 ct.	Galvite HS	3.0-4.5	(75-112)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Insulated Pipe and Ductwork, interior below 130°F (54°C):			
1 ct.	Loxon Concrete & Masonry Primer	2.1-3.2	(52.5-80)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Masonry, below 200°F (93°C)-Exterior:			
1 ct.	Loxon Concrete & Masonry Primer	2.1-3.2	(52.5-80)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)
Masonry, below 200°F (93°C)-Interior:			
1 ct.	Loxon Concrete & Masonry Primer	2.1-3.2	(52.5-80)
2 cts.	Silver-Brite Aluminum Paint	1.0-1.5	(25-40)

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

	Iron & Steel:	SSPC-SP6, 1 mil profile < 200°F (93°C) SSPC-SP10, 1 mil profile >200°F (93°C)
*	Aluminum:	SSPC-SP1
*	Galvanizing:	SSPC-SP1
*	Concrete & Masonry:	SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3

* Primer required

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	7.83 ± 0.2 lb/gl, .94 Kg/L

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

SILVER-BRITE® ALUMINUM PAINT

B59S11

Revised 12/11

APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel (below 200°F/93°C)
Remove all oil and grease from the surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3, Kem Bond SSPC-SP2
1 mil / 25 micron profile. Use Kem Bond HS Primer.

Iron & Steel (200°F/93°C-400°F/204°C)
Remove all oil and grease from the surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Blast Cleaning per SSPC-SP10/NACE 2, 1 mil / 25 micron profile. Apply two coats Silver-Brite Aluminum Paint.

Aluminum (below 200°F/93°C)
Remove all oil, grease, dirt, oxide, and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Concrete (below 200°F/93°C)
For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No. 310.2, CSP 1-3. Surface should be thoroughly clean and dry. Air, surface, and material temperature must be at least 55°F (13°C) before filling. Use Heavy Duty Block Filler. The filler must be thoroughly dry before topcoating per manufacturer's recommendations. Primer required.

Galvanized Metal (below 200°F/93°C)
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. Prime with Galvite HS. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch of a primer coat. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing below 200°F (93°C) requires a minimum of Hand Tool Cleaning per SSPC-SP2. Primer required.

Insulated Pipe & Ductwork (interior below 130°F/54°C)
Prime with PrepRite 200 Latex Wall Primer.
NOTE: For insulated pipe and ductwork 130°F (54°C) to 400°F (204°C), apply two coats Silver-Brite Aluminum Paint direct to surface.

Masonry
All masonry must be free of dirt, oil, grease, masonry dust, etc. Special care should be exercised while using this product for maximum performance. Film thickness and surface preparation are critical. Be especially concerned at lap areas and when using airless spray. Excessive film thickness will cause blistering and peeling. Insufficient film thickness may lead to premature failure of the coating. Always apply to cool surfaces (50°F/10°C-100°F/93°C). Primer required.

Previously Painted Surfaces (below 200°F/93°C)
If in sound condition, clean the surface of all foreign material. Spot primer bare areas with recommended primer. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer .....Not recommended

Cleanup .....Mineral Spirits, R1K4

Airless Spray
Pressure.....2000 psi
Hose.....1/4" ID
Tip .....010 - .012"

Conventional Spray
Gun .....Binks 95
Fluid Nozzle 63C
Air Nozzle.....63PB
Atomization Pressure.....50 psi
Fluid Pressure.....20 psi

Brush
Brush.....Natural Bristle

Roller
Cover .....1/4" woven with solvent resistant core

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

SILVER-BRITE® ALUMINUM PAINT

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APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Lightly stir before use. Do not shake with mechanical shaker or overly agitate, as a dull, non-uniform, mottled appearance will result.

For best results, apply to a cool surface between 50°F (10°C) - 100°F (38°C).

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**2.5** (63)	**3.5** (88)
Dry mils (microns)	**1.0** (25)	**1.5*** (40)*
~Coverage sq ft/gal (m^2/L)	**438** (10.7)	**658** (16.1)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**672** (16.5)	

***Critical**

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	4 hours	1-4 hours	30 minutes
Tack free:	8 hours	6-8 hours	2 hours
To recoat:	28 hours	24 hours	10 hours
To cure:	10 days	8 days	3 days

Drying time is temperature, humidity, and film thickness dependent.

Special care should be exercised while using this product for maximum performance. Film thickness and surface preparation are critical. Be especially concerned at lap areas and when using airless spray. Excessive film thickness will cause blistering and peeling. Insufficient film thickness may lead to premature rusting of the surface.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Mineral Spirits, R1K4. Clean tools immediately after use with Mineral Spirits, R1K4. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Mineral Spirits, R1K4.

For best results, apply to a cool surface between 60°F (16°C) -90°F (32°C).

Do not apply greater than 1.5 mils (40 microns) dft/ct

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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Protective & Marine Coatings

KEM® HI-TEMP
HEAT-FLEX® II 450

B59-300 Series
B59V405 Accelerator

Revised 9/09

PRODUCT INFORMATION

7.11

PRODUCT DESCRIPTION

KEM HI-TEMP HEAT-FLEX II 450 is a high performance, low VOC, high solids, silicone acrylic, heat resistant gloss topcoat. Specifically designed to provide color and gloss retention in continuous high heat source up to 450°F/232°C (Aluminum up to 600°F/315°C). Optional accelerator can be used when quicker dry times are required.

- 450°F/232°C temperature resistance (Aluminum up to 600°F/315°C)
- Optional Heat-Flex II Accelerator available

PRODUCT CHARACTERISTICS

Finish:	Topcoats-Gloss Primer-Flat
Color:	Black, New Toned White, Cirrus Gray, Shale Gray, Thunder Gray, Aluminum
Volume Solids:	51% ± 2%, may vary by color 44% ± 2%, Aluminum
Weight Solids:	68% ± 2%, may vary by color 57% ± 2%, Aluminum
VOC (EPA Method 24):	<425 g/L; 3.50 lb/gal - Colors <475 g/L; 3.9 lb/gal - Aluminum
Mix Ratio:	Not applicable Optional Heat-Flex II Accelerator used @ up to 3.0 oz/gal

Recommended Spreading Rate per coat:

	Colors		Aluminum	
	Min.	**Max.**	**Min.**	**Max.**
Wet mils (microns)	**2.0** 50	**3.0** 75	**2.2** 55	**3.3** 83
Dry mils (microns)	**1.0** 25	**1.5** 40	**1.0** 25	**1.5** 40
~Coverage sq ft/gal (m^2/L)	**545** 13.3	**816** 20.0	**470** 11.5	**704** 17.2
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**750** (18.3)			

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 2.0 mils wet (50 microns):

	@ 77°F/25°C *50% RH*	With Heat-Flex II Accelerator
To touch:	3 hours	1 hour
To handle:	8 hours	6 hours
To recoat:	18 hours	18 hours
Full cure:	3-4 hours @ 250°F (121°C) or 1 hour @ 400°F (204°C)	

Maximum recoat time of primer is 90 days, provided the surface temperature does not exceed 120°F (49°C)
Product will air dry at ambient temperatures, but it is thermoplastic and will soften with the application of heat until permanent heat curing is achieved.

Drying time is temperature, humidity, and film thickness dependent.

Pot Life: 8 hours with Heat-Flex II Accelerator @ 3.0 oz/gal

Shelf Life:	12 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	73°F (23°C) Seta Flash
Reduction:	Not recommended
Clean Up:	Xylene, R2K4

RECOMMENDED USES

For use over properly prepared steel surfaces such as:

- Stacks
- Furnaces
- Piping
- Boilers
- Heat exchangers
- Primer under thermal insulation

PERFORMANCE CHARACTERISTICS

Substrate*: Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*:
1 ct. Kem Hi-Temp Heat-Flex II 450 @ 1.5 mils (40 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Dry Heat Resistance	ASTM D2485	450°F (232°C), intermittent 500°F (260°C)
Heat Resistance	Fed. Spec. TT-P-28G, 500°F (260°C), 600°F (315°C) Aluminum	No cracking, blistering, flaking, or peeling

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Protective & Marine Coatings

KEM® HI-TEMP
HEAT-FLEX® II 450

B59-300 **SERIES**
B59V405 **ACCELERATOR**

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

	Dry Film Thickness / ct. Mils	(Microns)
Steel:		
2 cts. Kem Hi-Temp Heat-Flex II 450	1.0-1.5	(25-40)

NOTE: Kem Hi-Temp Heat-Flex II 450 also suitable for use over Inorganic Zinc Rich Primer.

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
Iron & Steel: SSPC-SP10/NACE 2, 1.0 mil (25 micron) profile maximum or SSPC-SP11, 1.0 mil (25 micron) profile maximum

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:
air and material: 50°F (10°C) minimum, 100°F (38°C) maximum
surface: 120°F (49°C) maximum
At least 5°F (2.8°C) above dew point
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:
Coating: 1 gallon (3.78L)
Accelerator: 1 quart (0.94L)

Weight:
Aluminum: 9.1 ± 0.2 lb/gal ; 1.1 Kg/L
Topcoats: 11.1 ± 0.2 lb/gal ; 1.3 Kg/L, may vary by color
Primer: 12.5 ± 0.2 lb/gal ; 1.5 Kg/L

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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KEM® HI-TEMP
HEAT-FLEX® II 450

B59-300 SERIES
B59V405 ACCELERATOR

APPLICATION BULLETIN

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (1.0 mils / 25 microns maximum). Power Tool Cleaning to Bare Metal per SSPC-SP11 is also acceptable (1.0 mil / 25 micron profile maximum). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.
On stainless steel, use Aluminum Oxide grit. Do not use chlorinated solvents for cleaning stainless steel.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	
air and material	50°F (10°C) minimum, 100°F (38°C) maximum
surface	120°F (49°C) maximum At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reduction .....Not recommended

Clean Up .....Xylene, R2K4

Airless Spray .....Not recommended

Conventional Spray
Gun .....Graco 700N
Fluid Nozzle .....045" - .055"
Air Nozzle.....20 cfm
Atomization Pressure.....50 psi
Fluid Pressure.....20-30 psi

Brush
Brush.....Natural bristle

Roller
Cover .....1/4" woven with solvent resistant core

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

KEM® HI-TEMP
HEAT-FLEX® II 450

B59-300 Series
B59V405 Accelerator

Application Bulletin

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Application Procedures

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly by boxing and stirring before use. Make certain pigment does not remain on bottom of can.

Coating will air dry at ambient temperatures, but is thermoplastic and will soften with the application of heat until permanent heat curing is achieved. When accelerated dry times are required, use Heat-Flex II Accelerator up to 3.0 oz/gal. Once Accelerator is added, product will have an 8 hour pot life.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Colors		Aluminum	
	Min.	Max.	Min.	Max.
Wet mils (microns)	**2.0** 50	**3.0** 75	**2.2** 55	**3.3** 83
Dry mils (microns)	**1.0** 25	**1.5** 40	**1.0** 25	**1.5** 40
~Coverage sq ft/gal (m^2/L)	**545** 13.3	**816** 20.0	**470** 11.5	**704** 17.2
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**750** (18.3)			

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 2.0 mils wet (50 microns):

	@ 77°F/25°C *50% RH*	With Heat-Flex II Accelerator
To touch:	3 hours	1 hour
To handle:	8 hours	6 hours
To recoat:	18 hours	18 hours
Full cure:	3-4 hours @ 250°F (121°C) or 1 hour @ 400°F (204°C)	

Maximum recoat time of primer is 90 days, provided the surface temperature does not exceed 120°F (49°C)
Product will air dry at ambient temperatures, but it is thermoplastic and will soften with the application of heat until permanent heat curing is achieved.
Drying time is temperature, humidity, and film thickness dependent.
Pot Life: 8 hours with Heat-Flex II Accelerator @ 3.0 oz/gal

All contamination between coats must be properly removed before applying subsequent topcoats.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Clean Up Instructions

Clean spills and spatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer's safety recommendations when using any solvent.

Disclaimer

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Performance Tips

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

Refer to Product Information sheet for additional performance characteristics and properties.

Safety Precautions

Refer to the MSDS sheet before use.

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Warranty

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Protective & Marine Coatings

ZINC CLAD® II PLUS
INORGANIC ZINC-RICH COATING

PART A	B69VZ12	BASE
PART B	B69VZ15	ACCELERATOR
PART F	B69D11	ZINC DUST

Revised: October 28, 2013

PRODUCT INFORMATION

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PRODUCT DESCRIPTION

ZINC CLAD II PLUS is a solvent-based, three component, inorganic ethyl silicate, zinc rich coating. This is fast drying, high solids, low VOC coating with 83%, by weight, of zinc dust in the dry film.

- Coating self-heals to resume protection if damaged
- Provides cathodic/sacrificial protection by the same mechanism as galvanizing
- Forms an inorganic barrier to moisture and solvents
- Meets Class B requirements for Slip Coefficient and Creep Resistance, 0.67
- Meets AASHTO M-300 specification

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Gray-Green
Volume Solid:	76% ± 2%, mixed
Weight Solid:	90% ± 2%, mixed
VOC (EPA Method 24): (mixed)	Unreduced: <320 g/L; 2.67 lb/gal Reduced 4%: <340 g/L; 2.8 lb/gal
Zinc Content in Dry Film:	83% ± 2% by weight
Mix Ratio:	3 components, premeasured 3.66 gallons (13.8L) mixed

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**6.0** (150)
Dry mils (microns)	**2.0** (50)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**305** (7.5)	**610** (15.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1219** (28.2)	

Dry film thickness in excess of 6.0 mils (150 microns) per coat is not recommended.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	25 minutes	20 minutes	5 minutes
To handle:	1 hour	20 minutes	15 minutes
To topcoat:	7 days	24 hours	8 hours
To cure:	7 days	36 hours	24 hours
To stack:	6 hours	2 hours	1 hour

Drying time is temperature, humidity, and film thickness dependent.

Pot Life: 8 hours @ 77°F (25°C)

High humidity will shorten pot life.

Sweat-in-Time: None required, but material should be mixed for at least 5 minutes before use.

Shelf Life:	Part A: 12 months, unopened Part B: 24 months, unopened Part F: 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	55°F (13°C)
Reducer/Clean Up:	
Above 70°F (21°C):	R7K111, R2K5, R2KT4, High Flash Naphtha 150
Below 70°F (21°C):	R2K4, R7K111, R6K9, R2K5, High Flash Naphtha 150

RECOMMENDED USES

For use over prepared blasted steel in areas such as:

- Bridges
- Shop or field application
- Nuclear Power Plants
- Nuclear fabrication shops
- Refineries
- Drilling rigs
- DOE Nuclear Fuel Facilities
- DOE Nuclear Weapons Facilities

- As a one-coat maintenance coating or as a permanent primer for severe corrosive environments (pH range 5-9)
- Ideal for application at low temperatures or service at high temperatures and/or humidity conditions
- Fresh and demineralized water immersion service (non-potable)
- Compliance with Class B Slip Coefficient rating when used alone or as part of a system with Steel Spec Epoxy Primer as a topcoat
- This product meets specific design requirements for non-safety related nuclear plant applications in Level II, III and Balance of Plant, and DOE nuclear facilities*.

* Nuclear qualifications are NRC license specific to the facility.

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10

System Tested*:

1 ct. Zinc Clad II Plus @ 3.0 mils (75 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	12.1 MPa = 1754 lb psi
Direct Impact Resistance	ASTM D2794-92	60 in lbs.
Dry Heat Resistance	ASTM D2485	750°F (399°C)
Flexibility	ASTM D522, 180° bend, 1" mandrel	Passes
Pencil Hardness	ASTM D3363	3H
Radiation Tolerance	ASTM D4082 / ANSI 5.12	Pass at 3.1 mils (77.5 microns) & 6.8 mils (170 microns)
Salt Fog Resistance	ASTM B117, 7000 hours	Rating 9 per ASTM D714 for Blistering; Rating 9 per ASTM D610 for Rusting
Slip Coefficient* (zinc only)	AISC Specifications for Structural Joints using ASTM A325 or ASTM A490 Bolts	Class B, 0.67
Slip Coefficient[1]*	AISC Specification for Structural Joints using ASTM A325 or ASTM A490 Bolts	Passes Class B, 0.56

Provides performance comparable to products formulated to specifications Mil-P-38336, Mil-P-46105, SSPC Paint 20, and SSPC Paint 29.

Footnotes:

[1] *1 ct. Zinc Clad II Plus @ 2.0-4.0 mils (50-100 microns) dft*
1 ct. Steel Spec Epoxy Primer @ 4.0-6.0 mils (100-150 microns) dft

*Refer to Slip Certification document

continued on back

Protective & Marine Coatings

ZINC CLAD® II PLUS
INORGANIC ZINC-RICH COATING

PART A	B69VZ12	BASE
PART B	B69VZ15	ACCELERATOR
PART F	B69D11	ZINC DUST

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel, High Performance Acrylic Topcoat, Atmospheric:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Fast Clad HB Acrylic	5.0-8.0	(125-200)
Steel, Immersion:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
Steel, Epoxy Topcoat, Atmospheric:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
Steel, Polyurethane Topcoat, Atmospheric:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
Steel, Polyurethane Topcoat, Atmospheric:			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1 ct.	Hi-Solids Polyurethane	3.0-5.0	(75-125)
Steel, Epoxy Siloxane Topcoat, Atmospheric			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1-2 cts.	Polysiloxane XLE-80	3.0-7.0	(75-175)

NOTE: 1 ct. of DTM Wash Primer can be used as an intermediate coat under recommended topcoats to prevent pinholing.

Steel (Class B Compliant System):			
1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Steel Spec Epoxy Primer, red	4.0-6.0	(100-150)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel:

Atmospheric: SSPC-SP6/NACE 3, 2 mil (50 micron) profile

Immersion: SSPC-SP10/NACE 2, 2 mil (50 micron) profile

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:

Material: 20°F (-7°C) minimum, 95°F (35°C) maximum

Air: 20°F (-7°C) minimum, 115°F (46°C) maximum

Surface: 20°F (-7°C) minimum, 130°F (54°C) maximum

At least 5°F (2.8°C) above dew point

Relative humidity: 95% maximum
Water misting may be required at humidities below 50%

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 3.66 gallons (13.8L) total, mixed
Part A: 2.21 gallon (8.3L) kit
Part B: 0.20 gallon (0.75L)
Part F: 73 lbs (33.1 Kg) zinc dust

Weight: 26.83 ± 0.2 lb/gal ; 3.2 Kg/L, mixed

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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Protective & Marine Coatings

ZINC CLAD® II PLUS
INORGANIC ZINC-RICH COATING

PART A	B69VZ12	BASE
PART B	B69VZ15	ACCELERATOR
PART F	B69D11	ZINC DUST

Revised: October 28, 2013

APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance.

Iron & Steel (atmospheric service):
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Iron & Steel (immersion service):
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Note: If blast cleaning with steel media is used, an appropriate amount of steel grit blast media may be incorporated into the work mix to render a dense, angular 1.5-2.0 mil (38-50 micron) surface profile. This method may result in improved adhesion and performance.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	
Material:	20°F (-7°C) minimum, 95°F (35°C) maximum
Air:	20°F (-7°C) minimum, 115°F (46°C) maximum
Surface:	20°F (-7°C) minimum, 130°F (54°C) maximum At least 5°F (2.8°C) above dew point
Relative humidity:	95% maximum Water misting may be required at humidities below 50%

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean up
Above 70°F (21°C).....R7K111, R2K5, R2KT4, High Flash Naphtha 150
Below 70°F (21°C).....R2K4, R7K111, R6K9, R2K5, High Flash Naphtha 150

Airless Spray
(use Teflon packings and continuous agitation)
Unit.....Graco 30:1
Pressure.....2700 psi
Hose.....3/8" ID
Tip.....019" - .021"
Filter.....30 mesh
Reduction.....As needed up to 4% by volume*
For continuous operation in larger areas, use Speeflo Airless Commander Zinc Pump. Set ball checks to maximum travel for viscous material.

Conventional Spray
(continuous agitation required)
Gun.....Binks 95
Fluid Nozzle.....66
Fluid Hose.....1/2" ID, 50 ft maximum
Air Nozzle.....63PB
Air Hose.....1/2" ID, 50 ft maximum
Atomization Pressure.....25 psi
Fluid Pressure.....10-20 psi
Reduction.....As needed up to 4% by volume*

*4% maximum for 340 g/L VOC compliance. Acceptable up to 15% reduction, however it will not be compliant for class B slip and creep.

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Brush .....For touch up in small areas only

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

ZINC CLAD® II PLUS
INORGANIC ZINC-RICH COATING

PART A	B69VZ12	BASE
PART B	B69VZ15	ACCELERATOR
PART F	B69D11	ZINC DUST

APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Zinc Clad II Plus comes in premeasured containers, which when mixed provides ready-to-apply material.

Mixing Instructions:
Thoroughly agitate Binder, Part A, using low speed continuous air driven agitation. Slowly mix all of Zinc Dust, Part F, into all of Binder Part A until mixture is completely uniform. Continue agitation and add Part B. After mixing, pour mixture through 30-mesh screen. Mixed material must be used within 8 hours. Do not mix previously mixed material with new. No "sweat-in" period is required.

If reducer solvent is used, add only after components have been thoroughly mixed.

Continuous agitation of mixture during application is required, otherwise zinc dust will quickly settle out.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**6.0** (150)
Dry mils (microns)	**2.0** (50)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**305** (7.5)	**610** (15.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1219** (28.2)	

Dry film thickness in excess of 6.0 mils (150 microns) per coat is not recommended.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 40°F/4.5°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	25 minutes	20 minutes	5 minutes
To handle:	1 hour	20 minutes	15 minutes
To topcoat:	7 days	24 hours	8 hours
To cure:	7 days	36 hours	24 hours
To stack:	6 hours	2 hours	1 hour

Drying time is temperature, humidity, and film thickness dependent.

Pot Life: 8 hours @ 77°F (25°C)

High humidity will shorten pot life.

Sweat-in-Time: None required, but material should be mixed for at least 5 minutes before use.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer R2KT4, 150 Flash Naphtha or R2K4, Xylene. Clean hands and tools immediately after use with Reducer R2KT4, 150 Flash Naphtha or R2K4, Xylene. Follow manufacturer's safety recommendations when using any solvent.

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PERFORMANCE TIPS

Topcoating: Note minimum cure times at normal conditions before topcoating. Longer drying periods are required if primer cannot be water mist sprayed when humidity is low. Water misting may be required at humidities below 50% to enhance cure rate.

Occasionally topcoats will pinhole or delaminate from zinc-rich coatings. This is usually due to poor ambient conditions or faulty application of topcoats. This can be minimized by:

- Provide adequate ventilation and suitable application and substrate temperature.
- If pinholing develops during topcoating, apply a mist coat of the topcoat, reduced up to 50%. Allow 10 minutes flash off and follow with a full coat.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

Any salting on the zinc surface due to weathering exposure must be removed prior to topcoating.

An intermediate coat is recommended to provide uniform appearance of the topcoat.

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and performance.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer R2KT4, 150 Flash Naphtha.

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Application above recommended film thickness may result in mud cracking and poor topcoat appearance.

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. If possible, plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Topcoats may be applied once 50 MEK double rubs are achieved, per ASTM D4752, Rating 4. No zinc or only slight traces should be visible. Coin hardness test can also be used.

Cured films of inorganic zinc coatings contain no appreciable amounts of combustible materials. Both Fire and Smoke Indices would be expected to approach 0.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

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Protective & Marine Coatings

SILVER-BRITE® HI-HEAT
SILICONE ALKYD ALUMINUM PAINT

B59S8

Revised: October 23, 2014

PRODUCT INFORMATION

2.44

PRODUCT DESCRIPTION

SILVER-BRITE HI-HEAT SILICONE ALKYD ALUMINUM PAINT is a heat cured, interior/exterior, ready mixed, silicone resin, modified with an alkyd and reinforced with 325-mesh extra fine aluminum flakes.

- For service temperatures between 500°F (260°C)-1000°F (537°C)
- Heat reflective
- Resists discoloration
- Brush, roll, or spray application

RECOMMENDED USES

For use over prepared steel surfaces in high temperature (between 500°F/260°C and 1000°F/537°C) environments.

- Boilers
- Breechings
- Exhausts
- Exterior / interior
- Heat exchangers
- Piping
- Stacks
- Industrial mufflers

PRODUCT CHARACTERISTICS

Finish:	Aluminum Sheen
Color:	Aluminum
Volume Solids:	25% ± 2%
Weight Solids:	42% ± 2%
VOC:	637 g/L; 5.32 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**4.0** (100)
Dry mils (microns)	**0.75** (19)	**1.0*** (25*)
~Coverage sq ft/gal (m^2/L)	**400** (9.8)	**535** (13.1)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**400** (9.8)	

*** Critical**

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	2 hours	1 hour	30 minutes
To recoat:	3 hours	2 hours	1 hour
To cure:	Air dry 24 hours (all temperatures)		

Slowly raise heat to operating temperature, taking about 1 hour going through 400°F (204°C) - 500°F (260°C) range. Requires heat cure.

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	36 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C).
Flash Point:	103°F (39°C), PMCC
Reducer:	Not recommended
Clean Up:	Mineral Spirits, R1K4

PERFORMANCE CHARACTERISTICS

- Heat reflective
- Dry heat resistant to 1000°F (537°C)
- Long term protection against weathering and moisture
- Ultraviolet light resistant
- Interior or exterior use
- Maintains "sheen"

continued on back

Protective & Marine Coatings

SILVER-BRITE® HI-HEAT
SILICONE ALKYD ALUMINUM PAINT

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PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel, interior:			
1-2 cts.	Silver-Brite Hi-Heat Silicone Alkyd Aluminum Paint	0.75-1.0	(19-25)
	Total dft:	0.75-2.0	(19-50)

NOTE: Requires heat cure see instructions under "Drying Schedule"

Steel, exterior:			
2 cts.	Silver-Brite Hi-Heat Silicone Alkyd Aluminum Paint	0.75-1.0	(19-25)
	Total dft:	1.5-2.0	(40-50)

NOTE: Requires heat cure see instructions under "Drying Schedule"

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel: SSPC-SP10/NACE 2
0.5-1.0 mil (13-25 microns) profile

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) containers

Weight: 9.20 ± 0.2 lb, 1.1 Kg/L

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

Protective & Marine Coatings

SILVER-BRITE® HI-HEAT
SILICONE ALKYD ALUMINUM PAINT

B59S8

Revised: October 23, 2014

APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel (atmospheric service)
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (0.5-1.0 mil/13-25 microns maximum). Coat any bare steel the same day as it is cleaned or before flash rusting occurs.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer .....Not recommended

Clean Up .....Mineral Spirits, R1K4

Airless Spray
Pressure.....2000 psi
Hose.....1/4" ID
Tip .....015"

Conventional Spray
Gun .....Binks 95
Fluid Nozzle 63C
Air Nozzle.....63PB
Atomization Pressure.....60 psi
Fluid Pressure.....20 psi

Brush
Brush.....Natural Bristle

Roller
Cover .....1/4" woven with solvent resistant core

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

SILVER-BRITE® HI-HEAT
SILICONE ALKYD ALUMINUM PAINT

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APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Lightly stir before use. Do not shake with mechanical shaker or overly agitate, as a dull, non-uniform, mottled appearance will result.

Special care should be exercised while using this product for maximum performance. Film thickness and surface preparation are critical. Be especially concerned at lap areas and when using airless spray. Excessive film thickness will cause blistering and peeling. Insufficient film thickness may lead to premature rusting of the surface. Always apply to cool surfaces (50°F/10°C-100°F/38°C).

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**4.0** (100)
Dry mils (microns)	**0.75** (19)	**1.0*** (25*)
~Coverage sq ft/gal (m^2/L)	**400** (9.8)	**535** (13.1)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	**400** (9.8)	

*** Critical**

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	2 hours	1 hour	30 minutes
To recoat:	3 hours	2 hours	1 hour
To cure:	Air dry 24 hours (all temperatures)		

Slowly raise heat to operating temperature, taking about 1 hour going through 400°F (204°C) - 500°F (260°C) range. Requires heat cure.

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Mineral Spirits, R1K4. Clean tools immediately after use with Mineral Spirits, R1K4. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

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PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Mineral Spirits, R1K4.

Always apply to a cool surface 50°F (10°C) - 100°F (38°C)

No primer is required.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

Do not apply greater than 1.0 mils (25 microns) dft/ct.

Not intended for use on interior of flues, stacks, etc.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

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WARRANTY

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EXTERIOR OIL-BASED
Wood Primer
Y24W8020

As of 01/01/2013, Complies with:			
OTC	Yes	LEED® 09 CI	No
SCAQMD	No	LEED® 09 NC	No
CARB	No	LEED® 09CS	No
CARB SCM 2007	No	LEED® H & S	No
MPI #	5	NGBS	No

DESCRIPTION

Exterior Oil-Based Wood Primer is designed for blocking tannin, water, and other stains on exterior wood, manufactured siding, hardboard, rough sawn siding, and trim as a spot primer or overall primer.

- Penetrates and seals bare wood for strong adhesion and a long lasting finish
- Blocks stains from water, wood tannins and knots
- Resists mildew

For use on these surfaces:
- Pine
- Fir
- Cedar
- Redwood
- Oak
- Maple
- Ash
- Hardboard
- Primed Metal
- Previously Painted Surfaces

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

CHARACTERISTICS

Color: White
Coverage: 350 - 400 sq ft/gal @ 4 mils wet; 2.3 mils dry
Drying Time, @ 50% RH:

	@ 35-45°F	@ 45°F+
Touch:	4-8 hours	2-4 hours
Recoat:	24-48 hours	24 hours

Drying and recoat times are temperature, humidity and film thickness dependent.
Flash Point: 115°F, PMCC
Finish: 0-18 units @ 85°
Vehicle Type: Alkyd

Y24W08020
VOC (less exempt solvents): 317 g/L; 2.64 lb/gal
Volume Solids: 59 ± 2%
Weight Solids: 77 ± 2%
Weight per Gallon: 11.4 lb
WVP Perms (US) 2.7 grains/(hr ft^2 in Hg)

Tinting
Requires Blend-A-Color Toner for tinting. For best color development, use the recommended "P"-shade primer. If desired, up to 4 oz per gallon of Blend-A-Color Toner can be used to approximate the topcoat color. Check color before use.

When spot priming on some surfaces, a non-uniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For exterior exposure, this primer must be topcoated within 14 days with architectural latex or oil finishes.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull.

Seal stains from water, smoke, ink, pencil, grease, etc. with an appropriate primer sealer.

Wood, Composition Board - Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. Spot prime knots and sap streaks.

On woods that present potential tannin bleeding, such as redwood and cedar, Exterior Oil-Based Wood Primer can be used. Care must be taken to determine if tannins will be activated by the solvent in the coating. To test for bleeding, coat a 4 foot by 4 foot section with the primer. If no bleeding is evident within 4 hours, proceed with complete priming. If bleeding occurs, use Exterior Latex Wood Primer.

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EXTERIOR OIL-BASED
Wood Primer
Y24W8020

SURFACE PREPARATION

Mildew
Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Caulking
Fill gaps between windows, doors, trim, and other through-wall openings with the appropriate caulk after priming the surface.

APPLICATION

Apply at temperatures above 35°F.
No reduction necessary.

Brush
Use a natural bristle brush
Roller
Use a 3/8" - 3/4" nap synthetic cover
Airless Spray
Pressure .....2000 psi
Tip..... .019"-.021"

CLEANUP INFORMATION

Clean spills, spatters, and tools immediately with mineral spirits. Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

For exterior use only.
Non-photochemically reactive.
Not for use on horizontal surfaces, such as a roof, deck, or floor, or where water may collect.

LABEL CAUTIONS
CAUTION contains ALIPHATIC HYDROCARBONS and CRYSTALLINE SILICA. Contents are COMBUSTIBLE. Keep away from heat and open flame. VAPOR HARMFUL. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.
HOTW 04/01/2013 Y24W08020 34 00

WOODSCAPES®

Exterior Acrylic Solid Color Stain A15 Series

As of 12/01/2012, Complies with:			
OTC	Yes	LEED® 09 CI	N/A
SCAQMD	Yes	LEED® 09 NC	N/A
CARB	Yes	LEED® 09 CS	N/A
CARB SCM 2007	Yes	LEED® H	N/A
MPI #	16	NGBS	N/A

CHARACTERISTICS

WoodScapes Exterior Acrylic Solid Color Stain provides a long lasting, mildew resistant coating with excellent penetration for protecting most vertical exterior wood surfaces. This can be applied at air, surface, and material temperatures as low as 35°F.

Colors: solid stain colors
A sample brush-out is recommended to ensure color satisfaction.

Coverage: 200-400 sq ft/gal @ 4-8 mils wet; 1.3-2.6 mils dry
Depending on porosity and texture
Note: New wood normally requires less product than old, weathered wood. This is due to older wood being more porous than newer wood.

Drying Time @ 50% RH:
temperature and humidity dependent

	@ 35-45°F	@ 45°F+
Touch:	2 hour	2 hours
Recoat:	24-48 hours	5 hours

Drying and recoat times are temperature, humidity, and film thickness dependent
Air and surface temperatures must not drop below 35°F for 48 hours after application.

Finish: 0-10 units @ 60°
Flash Point: N/A
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-5	100%
Deep Base	4-12	100%
Ultradeep Base	4-12	100%

Vehicle Type: Acrylic Latex
A15W00051
VOC (less exempt solvents): 96 g/L; 0.80 lb/gal
Volume Solids: 33 ± 2%
Weight Solids: 49 ± 2%
Weight per Gallon: 10.9 lb

Mildew Resistant
This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

SPECIFICATIONS

Wood, Plywood, Composition Board
2 cts. WoodScapes Exterior Acrylic Solid Color Stain

Important: Stains tend to lap (dark lines where two freshly coated areas overlap). These tips will help avoid lap marks and keep the appearance uniform:

- Do not stain in direct sun or on a hot surface.
- Stain from a dry area into the adjoining wet stain area.
- Keep the leading edge wet and distribute the finish evenly.
- Use natural breaks as boundaries to divide large areas into smaller, more manageable ones.
- Stain a board from end to end.
- Use two coats on badly weathered or unfinished wood.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner to remove all dirt, air pollution, chalk, etc., especially in areas not exposed to direct weathering such as under eaves and porch ceilings. Rinse and allow the surface to dry. If after cleaning, the surface still appears dirty, suspect mildew.

Remove mildew before staining by washing with a solution of 1 pint liquid bleach and 1 gallon water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Dull glossy surfaces by using sandpaper or an abrasive cleaner. Remove sanding dust or cleaner residue.

Apply appropriate patching material to cracks, nail holes, or other surface imperfections.

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WOODSCAPES®

Exterior Acrylic Solid Color Stain A15 Series

SURFACE PREPARATION

Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface.

Smooth or Rough Wood Siding and Plywood.
Sand any exposed, deteriorated wood to a fresh surface.
Some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. The first coat of this product may show some tannin discoloration, but it will be trapped in the first coat. A second coat will uniform the appearance. In severe cases and at some knots, a coat of Exterior Oil-Based Wood Primer may be needed prior to staining

Pressure Treated Wood
Test the absorbency of the wood by sprinkling water on the surface. If the water penetrates into the wood quickly, the wood is ready to finish. If the water beads up or does not penetrate, allow the wood to weather several weeks and test for absorbency again. Prepare the surface like any other wood surface.

Galvanized and Aluminum.
Wash with a water-based degreasing cleaner, rinse, and allow to dry. No primer is needed.

Composition Board/Hardboard.
Remove any wax that may have leached out of the siding.

Mill Glaze is a glossy finish on new, smooth sawn wood or on the peaks of some textured wood. This must be removed by sanding to allow the stain to penetrate.

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the **air, surface, and material temperature** are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.
Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.
On large expanses of metal siding, the air, surface, and material temperatures must be 50°F or higher.
No reduction necessary.
Brush
Use a nylon/ polyester brush.
Roller
Use a 3/8" -3/4" nap synthetic cover.
Spray—Airless
Pressure..... 2200-2400 psi
Tip..... .019" - .021"

After spray applying the material, while the material is still wet, back roll or back brush to force the material into the wood fibers and to achieve a uniform appearance.
Stain the wall area first, then the trim/ windows, starting at the top and working down.
Stain from a dry area into an adjoining wet stain area.
For the best performance, and to achieve the warranty protection, apply two coats.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturers safety recommendations when using mineral spirits.

CAUTIONS

For exterior use only.
Not for use on horizontal surfaces, such as a roof, deck, or floor, where water may collect.
Use DeckScapes Solid Color Stain for exterior wood deck floors.

CAUTION contains CRYSTALLINE SILICA, ZINC. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.
HOTW 04/01/2013 A15W00051 25 00

SHERWIN WILLIAMS.

GREENGUARD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

108.04A

PREPRITE® PROBLOCK®

Interior/Exterior Latex Primer/Sealer B51-600 Series

As of 08/01/2013, Complies with:			
OTC	Yes	LEED® 09 CI	Yes
SCAQMD	Yes	LEED® 09 NC	Yes
CARB	Yes	LEED® 09 CS	Yes
CARB SCM 2007	Yes	LEED® H	Yes
MPI #	3,6,17,39	NGBC	Yes

CHARACTERISTICS

- Assures uniform appearance of topcoats
- Fast dry
- Apply at temperatures down to 35°F
- Assures adhesion of the topcoat to slick, glossy surfaces
- Seals out solvent sensitive stains - tar, solvent based markers, etc.
- Seals minor dried water stains and tannin
- Provides easy “slip” for positioning of wallpaper
- **Anti-microbial** - This product contains agents which inhibit the growth of microbes on the surface of this paint film.

Use on interior:
- Ceiling Tiles
- Paneling
- Wall Laminate
- Cured Plaster
- Drywall
- Varnished Woodwork
- Kitchen Cabinets
- Ceramic Wall Tile
- Under wallcovering

Use on interior & exterior:
- Wood
- Aluminum
- Galvanized Metal
- Previously Painted Surfaces
- PVC Piping
- Concrete and Masonry
- Many Plastics
- Glossy Surfaces
- Fiberglass
- Copper
- Glazed Block

CHARACTERISTICS

Color: White & Deep Base
Coverage: 400 sq ft/gal @ 4 mils wet; 1.4 mils dry
Drying Time, @ 77°F, 50% RH:
Touch: 30 minutes
Recoat as a primer 1 hour
Recoat as a stain sealer: 4 hours
To apply wallcovering 3 hours
Drying and recoat times are temperature, humidity and film thickness dependent.
Flash Point: N/A
Finish: 3-13 units @ 85°
Tinting: requires ColorCast Ecotoners

Base	oz/gal	Strength
White	0 - 4	100%
Deep Base	4-12	100%

Vehicle Type: Styrenated Acrylic Latex
B51W00620
VOC (less exempt solvents): <50 g/L; <0.42 lb/gal
As per 40 CFR 59.406 and SOR/2009-264, s.12
Volume Solids: 35 ± 2%
Weight Solids: 52 ± 2%
Weight per Gallon: 10.9 lb

For best topcoat color development, use the recommended "P"-shade primer. If desired, up to 4 oz per gallon of ColorCast Ecotoners can be used to approximate the topcoat color. Check color before use.

When spot priming on some surfaces, a non-uniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.
For optimal performance, this primer must be topcoated with a latex, alkyd/oil, water based epoxy, or solvent based epoxy coating on architectural applications.
For exterior exposure, this primer must be topcoated within 14 days with architectural latex or oil finishes.
For better performance when priming an entire house, use Exterior Latex or Oil-Based Primers

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull.

Special recommendations - After priming stained areas, allow to dry 4 hours, test a small area for bleeding by applying the topcoat before painting the entire project. If the stain bleeds through, apply a second coat of primer and allow to dry overnight and retest before topcoating.

Fire restoration work - Thoroughly clean the surface before applying to smoke stained areas. Apply one or two coats of PrepRite ProBlock Latex Primer/Sealer and test a small area for bleeding before painting the entire surface.

Always check for compatibility and adhesion to the surface by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

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108.04A

PREPRITE® PROBLOCK®

Interior/Exterior Latex Primer/Sealer B51-600 Series

SURFACE PREPARATION

General Priming - PrepRite ProBlock Latex Primer/Sealer can be topcoated in 1 hour in non-stain blocking applications.

Plaster - Must be cured, usually 30 days, and hard. If painting cannot wait, allow the surface to dry 7 days and prime with Loxon Concrete and Masonry Primer. Soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with water and allow to dry before painting.

Wood - Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

Tile, laminate, ceramic and plastic tiles, and similar glossy surfaces, must be free of all oil, grease, and soap residue. Do not use this product in areas subject to excessive water, e.g.: in showers, around sinks, on counter tops.

Testing - On hard, slick, glossy, or otherwise hard to paint surfaces, after preparing the surface, apply a test area of this primer, allow to dry properly and test for adhesion.

Caulking - Fill gaps between walls, ceilings, crown moldings, and other trim with the appropriate caulk after priming the surface.

SURFACE PREPARATION

Mildew - Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. DO NOT ADD DETERGENTS OR AMMONIA TO THE BLEACH/WATER SOLUTION.

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours. Air and surface temperatures must not drop below 35°F for 48 hours after application.

Do not reduce for stain blocking.
No reduction necessary.
Brush - Use a nylon/polyester brush.
Roller - Use a 3/8" nap soft woven roller cover.
Spray—Airless
Pressure..... 2000 psi
Tip..... .015"-.021"

CLEANUP INFORMATION

Clean spills, spatters, hands and tools with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

CAUTIONS

Protect from freezing.

LABEL CAUTIONS

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 04/01/2013 B51W00620 09 00

105.23

WOODSCAPES®

Exterior Polyurethane Semi-Transparent Stain

A15T00005

As of 12/01/2012, Complies with:			
OTC	Yes	LEED® 09 CI	N/A
SCAQMD	Yes	LEED® 09 NC	N/A
CARB	Yes	LEED® 09 CS	N/A
CARB SCM 2007	Yes	LEED® H	N/A
MPI #	none	NGBS	N/A

CHARACTERISTICS

WoodScapes Exterior Polyurethane Semi-Transparent provides a long lasting, mildew resistant film with excellent penetration for protecting most vertical exterior wood surfaces. This product can be applied at air, surface, and material temperatures as low as 35°F.

Color: Semi-Transparent stain colors
A sample brushout is recommended to ensure color satisfaction.

Coverage:

Rough/porous:	100-200 sq ft/gal
Smooth:	350 sq ft/gal

Depending on porosity and texture
Note: New wood normally requires less product than old, weathered wood. This is due to older wood being more porous than newer wood.

Drying Time @ 50% RH:
temperature and humidity dependent

	@ 35-45°F	@ 45°F+
Touch:	2 hour	2 hours
Recoat:	24-48 hours	5 hours

Drying and recoat times are temperature, humidity, and film thickness dependent
Air and surface temperatures must not drop below 35°F for 48 hours after application.
When applying a second coat, it must be applied within 30 days of the first coat.

Finish: 0 units @ 85°
Flash Point: N/A
Tinting with CCE:

Base	oz/gal	Strength
Clear Base	½ - 4	100%

Must be tinted for use, do not exceed 4 oz/gal of tinting color.
Vehicle Type: Polyurethane
A15T00005
VOC (total):
79 g/L; 0.66 lb/gal
VOC (less exempt solvents):
496 g/L; 4.14 lb/gal
Volume Solids: 8 ± 2%
Weight Solids: 10 ± 2%
Weight per Gallon: 8.5 lb

Mildew Resistant
This product contains agents which inhibit the growth of mildew on the surface of this paint film.

SPECIFICATIONS

Wood, Plywood
2 cts. WoodScapes House Stain Exterior Polyurethane Semi-Transparent

Two coats are necessary to achieve the selected color. Wait the appropriate recoat time for the first coat to dry.

Important: Stains tend to lap (dark lines where two freshly coated areas overlap). These tips will help avoid lap marks and keep the appearance uniform:

- Do not stain in direct sun or on a hot surface.
- Stain from a dry area into the adjoining wet stain area.
- Keep the leading edge wet and distribute the finish evenly.
- Use natural breaks as boundaries to divide large areas into smaller, more manageable ones.
- Stain a board from end to end.
- Use two coats on badly weathered or unfinished wood.

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all existing paint and replace any deteriorated substrate. Although this can be applied over earlier semi-transparent stains, some of the old color may be visible through this semi-transparent film.

Remove all surface contamination by washing with an appropriate cleaner to remove all dirt, air pollution, chalk, etc., especially in areas not exposed to direct weathering such as under eaves and porch ceilings. Rinse and allow the surface to dry. If after cleaning, the surface still appears dirty, suspect mildew.

Remove mildew before painting by washing with a solution of **1 pint liquid bleach and 1 gallon water**. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

Maintenance clean by using a non-chlorinated bleach alternative.

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WOODSCAPES®

Exterior Polyurethane Semi-Transparent Stain

A15T00005

SURFACE PREPARATION

Apply appropriate patching material to cracks, nail holes, or other surface imperfections. Filled areas will take the stain differently than bare wood.

Caulk around windows, doors, and other openings with an appropriate caulk. The stain will appear different over caulk. Consider using a caulk that is a color similar to the stain color.

Smooth or Rough Wood Siding and Plywood. Sand any exposed, deteriorated wood to a fresh surface.

Mill Glaze is a glossy finish on new, smooth sawn wood or on the peaks of some textured wood. This must be removed by sanding to allow the stain to penetrate.

Pressure Treated Wood
Test the absorbency of the wood by sprinkling water on the surface. If the water penetrates into the wood quickly, the wood is ready to finish. If the water beads up or does not penetrate, allow the wood to weather several weeks and test for absorbency again. Prepare the surface like any other wood surface.
Due to the green tone of many brands of pressure treated lumber, the color of the stain may look different from the color selected. Check the color on a test area prior to staining the entire project.

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the **air, surface, and material temperature** are above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours.
Do not apply at air or surface temperatures below 35°F or when air or surface temperatures may drop below 35°F within 48 hours.

Brush
No reduction necessary. Use a nylon\polyester brush.
Roller
No reduction necessary. Use a 3/8" - 3/4" nap synthetic or lambswool roller cover.
Spray—Airless
Pressure..... 2000 psi
Tip..... .015"-.017"
Reduction..... as needed up to 1 pt/gal
Spray—Conventional
Air Pressure ..... 40 psi
Fluid Pressure..... 20 psi
Cap/Tip 704/FX
Reduction..... as needed up to 1 pt/gal

For the best performance, and to achieve the warranty protection, apply two coats.

When applying a second coat, it must be applied within 30 days of the first coat.

After 30 days, test the absorbency of the wood by sprinkling water on the surface. If the water does not bead up and penetrates into the wood quickly, the wood is ready to refinish. If the water beads up or does not penetrate, allow the wood to weather longer and test for absorbency again.

CAUTIONS

Maintenance clean by using a non-chlorinated bleach alternative.
For exterior use only.
Do not use on composition board.
Do not use on roofs.
Not for use on horizontal surfaces, such as a roof, or floor, where water may collect.

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™ PRIMER
ACRYLIC FLOOR COATING

B90W110 **OFF WHITE**

Revised: March 27, 2014

PRODUCT INFORMATION

8.15

PRODUCT DESCRIPTION

ARMORSEAL TREAD-PLEX is a general purpose, interior/exterior, low VOC, HAPS free 100% acrylic, low odor, waterborne, concrete floor primer. When topcoated, the system provides a tough, alkali resistant finish which will withstand abrasion, grease, oils, and cleaning equipment.

- One component
- Water clean up
- Fast dry
- Enhances adhesion by penetrating into the concrete
- Excellent surface wetting properties
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Low Sheen
Color:	Off White
Volume Solids:	43% ± 2%
Weight Solids:	57% ± 2%
VOC (EPA Method 24):	<100 g/L; .83 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**4.7** (118)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**341** (8.3)	**458** (11.2)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**688** (16.8)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	30 minutes	10 minutes
To recoat:	3 hours	45 minutes	15 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To cure:	7 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	24 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C)
Flash Point:	>200°F (93°C) Seta
Reducer/Clean Up:	Water

RECOMMENDED USES

For use as part of a system over prepared concrete and wood floors and aisleways.

- Laboratories
- Light assembly and production areas
- Hospitals
- Industrial/commercial office areas
- Helipads
- Not recommended for areas subject to hot tire pickup
- Suitable for use in USDA inspected facilities.

PERFORMANCE CHARACTERISTICS

Substrate*: Concrete

Surface Preparation*: Clean, dry, sound

System Tested*:

1 ct: ArmorSeal Tread-Plex Primer @ 2.0 mils (50 microns) dft
1 ct. ArmorSeal Tread-Plex Finish @ 2.0 mils (50 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance (primer only)	ASTM D4060, CS10 wheel, 500 cycles, 500 g load	<50 mg loss
Adhesion (primer only)	ASTM D4541	720 psi
Direct Impact Resistance (primer only)	ASTM D2794	60 in. lb.
Dry Heat Resistance	ASTM D2485	200°F (93°C)
Flexibility (primer only)	ASTM D522, 180° bend, 1/8" mandrel	Passes
Pencil Hardness (primer only)	ASTM D3363	B

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™ PRIMER
ACRYLIC FLOOR COATING

B90W110 **OFF WHITE**

PRODUCT INFORMATION

8.15

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Concrete Floors:			
1 ct.	ArmorSeal Tread-Plex Primer	1.5-2.0	(40-50)
1-2 cts.	ArmorSeal Tread-Plex Finish	1.5-2.0	(40-50)
Wood Floors:			
1 ct.	ArmorSeal Tread-Plex Primer	1.5-2.0	(40-50)
1-2 cts.	ArmorSeal Tread-Plex Finish	1.5-2.0	(40-50)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:

Concrete Floors: SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3

Wood Floors: Clean, smooth, dust free

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) and 5 gallon (18.9L) containers

Weight: 11.3 ± 0.2 lb/gal ; 1.3 Kg/L, may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™ PRIMER
ACRYLIC FLOOR COATING

B90W110 **OFF WHITE**

Revised: March 27, 2014

APPLICATION BULLETIN

8.15

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2 Concrete Surface Preparation.

Wood
Surface must be clean, dry and sound. Remove any oils and dirt from the surface using a degreasing solvent or strong detergent. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Prime with recommended primer and paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up ..... Water

Brush
Brush.....Nylon/Polyester
Reduction.....As needed up to 6% by volume

Roller
Cover .....1/4"-3/8" woven with solvent resistant core
Reduction.....As needed up to 6% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™ PRIMER
ACRYLIC FLOOR COATING

B90W110 **OFF WHITE**

APPLICATION BULLETIN

8.15

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**4.7** (118)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**341** (8.3)	**458** (11.2)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**688** (16.8)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	30 minutes	10 minutes
To recoat:	3 hours	45 minutes	15 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To cure:	7 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with soap and warm water, followed by a mineral spirits flush, to prevent rusting.

Always test adhesion by applying a test patch of 2-3 square feet. Allow to dry one week before checking adhesion.

Anti-slip additives, such as H&C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

Do not use hydrocarbon solvents for cleaning.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™

100% ACRYLIC WATER BASED FLOOR COATING

B90 Series

Revised: March 27, 2014

Product Information

8.12

Product Description

ARMORSEAL TREAD-PLEX is a general purpose, interior/exterior, low VOC, 100% acrylic, low odor, waterborne floor coating. This dries rapidly to a tough, alkali resistant finish which will withstand hard wear, abrasion, grease, oils, and cleaning equipment.

- One component
- Fast dry
- Slip resistant properties
- Abrasion resistant
- Outstanding application properties
- Water clean up

Product Characteristics

Finish:	Semi-Gloss
Color:	Wide variety of colors available
Volume Solids:	43% ± 2%, may vary by color
Weight Solids:	55% ± 2%, may vary by color
VOC (EPA Method 24):	<100 g/L; .83 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**4.5** (112)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**345** (8.4)	**460** (11.3)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**688** (16.8)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	45 minutes	30 minutes	10 minutes
To recoat:	6 hours	4 hours	30 minutes
Foot traffic:	18 hours	8 hours	1 hour
Heavy traffic:	24 hours	18 hours	6 hours
To cure:	7 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	24 months, unopened Store indoors at 50°F (10°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), PMCC
Reducer/Clean Up:	Water

Recommended Uses

For use over prepared concrete and wood floors, steps, stairwells, aisleways, or previously painted floor surfaces in sound condition.

- Laboratories
- Light assembly and production areas
- Hospitals
- Industrial/commercial office areas
- Helipads
- Not recommended for areas subject to hot tire pickup
- Meets ADA requirements for Slip Resistance for floors
- Suitable for use in USDA inspected facilities

Performance Characteristics

Substrate*: Concrete

Surface Preparation*: Clean, dry, sound

System Tested*:

2 cts: ArmorSeal Tread-Plex @ 4.0 mils (100 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	No more than 37 mg loss
Adhesion	ASTM D4541; ASTM D3359	702 psi (ASTM D4541); 5A (ASTM D3359)
Direct Impact Resistance, on steel	ASTM D2794	30 in. lb.
Dry Heat Resistance	ASTM D2485	150°F (66°C), intermittent at 200°F (93°C)
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Humidity Resistance	ASTM D4585, 500 hours	Rating 10 per ASTM D714 for blistering
Pencil Hardness	ASTM D3363	F
Scrub Resistance (3 mils dft)	ASTM D2486, Section 8	Passes 1000 cycles minimum
Slip Resistance, Floors	ASTM C1028, .60 Minimum Static Coefficient of Friction	Passes wet and dry, with and without SharkGrip Additive
Wet Adhesion (one coat @ 2.0 mils dft)	TT-P-1511A, 6000 cycles	Passes

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™

100% ACRYLIC WATER BASED FLOOR COATING

B90 SERIES

PRODUCT INFORMATION

8.12

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Concrete Floors:			
2 cts.	ArmorSeal Tread-Plex	1.5-2.0	(40-50)
Concrete Floors:			
1 ct.	ArmorSeal Tread-Plex Primer	1.5-2.0	(40-50)
1-2 cts.	ArmorSeal Tread-Plex Finish	1.5-2.0	(40-50)
Wood Floors:			
2 cts.	ArmorSeal Tread-Plex	1.5-2.0	(40-50)
Wood Floors:			
1 ct.	ArmorSeal Tread-Plex Primer	1.5-2.0	(40-50)
1-2 cts.	ArmorSeal Tread-Plex Finish	1.5-2.0	(40-50)
Previously Painted Floors in Sound Condition:			
1-2 cts.	ArmorSeal Tread-Plex	1.5-2.0	(40-50)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Concrete Floors: SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3

Wood Floors: Clean, smooth, dust free

Do not use hydrocarbon solvents for cleaning

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint package colors. Pastel and Ultradeep bases tint at 100% strength with EnviroToner, BAC, or CCE. Better performance will be achieved with Envirotoners. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) and 5 gallon (18.9L) containers

Weight: 10.7 ± 0.2 lb/gal ; 1.3 Kg/L, may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™

100% ACRYLIC WATER BASED FLOOR COATING

B90 SERIES

Revised: March 27, 2014

APPLICATION BULLETIN

8.12

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvent for cleaning.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2 Concrete Surface Preparation.

Wood
Surface must be clean, dry and sound. Remove any oils and dirt from the surface using a degreasing solvent or strong detergent. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Prime with recommended primer and paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 100°F (38°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up ..... Water

Brush
Brush.....Nylon/Polyester
Reduction.....As needed up to 6% by volume

Roller
Cover .....1/4"-3/8" woven with solvent resistant core
Reduction.....As needed up to 6% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

continued on back

ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® TREAD-PLEX™

100% ACRYLIC WATER BASED FLOOR COATING

B90 SERIES

APPLICATION BULLETIN

8.12

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**4.5** (112)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**345** (8.4)	**460** (11.3)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**688** (16.8)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 100°F/38°C
To touch:	45 minutes	30 minutes	10 minutes
To recoat:	6 hours	4 hours	30 minutes
Foot traffic:	18 hours	8 hours	1 hour
Heavy traffic:	24 hours	18 hours	6 hours
To cure:	7 days	7 days	7 days

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

DISCLAIMER

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PERFORMANCE TIPS

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

This product is not slip resistant where moisture, water, grease, or other liquids may be present.

Anti-slip additives, such as H&C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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WARRANTY

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: January 8, 2015

Product Information

8.49

Product Description

ARMORSEAL 1K Waterbased Urethane Floor Enamel is a gloss, high performance, one component polyester waterbased urethane, formulated specifically for industrial floor applications. Provides outstanding abrasion resistance, good chemical resistance, with excellent color and gloss retention.

- Fast dry
- Low VOC
- Excellent color and gloss retention
- Chemical resistant
- Impact and abrasion resistant
- Performance comparable to two component WB urethane
- Resistant to "hot tire" pick-up
- May exhibit "tire tracking"
- Outstanding application properties

Product Characteristics

Finish:	Gloss
Color:	Wide range of colors possible.
Volume Solids:	25.5% ± 2%,(Clear) 34% ± 2%, (Colors) (May vary by color)
Weight Solids:	28.5% ± 2%, (Clear) 44% ± 2%, (Colors) (May vary by color)
VOC (EPA Method 24):	<250 g/L; 2.0 lb/gal

Recommended Spreading Rate per coat:

	Clear Coat		Colors	
	Min.	Max.	Min.	Max.
Wet mils (microns)	**4.0** 100	**8.0** 200	**6.0** 150	**12.0** 300
Dry mils (microns)	**1.0** 25	**2.0** 50	**2.0** 50	**4.0** 100
~Coverage sq ft/gal (m^2/L)	**204** 5.0	**408** 10.0	**136** 3.3	**272** 6.6
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**544** (13.3)			

Apply by brush or roller only.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1.5 hours	45 minutes	25 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To recoat (self):			
minimum:	8 hours	6 hours	3 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before topcoating.
Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	24 months, unopened at 77°F (25°C) Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), Seta Flash, mixed
Reducer/Clean Up:	Water

Recommended Uses

For use over prepared concrete floors or previously painted floor surfaces in sound condition.

- Manufacturing plants
- Laboratories
- Schools
- Hospitals
- Aircraft Hangers
- Interior high maintenance areas
- Exterior floors-Helipads
- Suitable for use in USDA inspected facilities
- Meets ADA requirements for slip resistance for floors
- Acceptable for use in Canadian Food Processing facilities, categories: D2 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)

Performance Characteristics

Substrate*: Concrete

Surface Preparation*: Clean, dry, sound

System Tested*:

1 ct. ArmorSeal Floor Plex 7100 Primer @ 2.0 mils (50 microns) dft
1 ct. ArmorSeal 1K WB Urethane Floor Enamel @ 3.0 mils (75 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS10 wheel, 1000 cycles, 1 kg load	145 mg loss
Adhesion	ASTM D4541	350 psi, 100% Concrete Failure
Direct Impact Resistance (topcoat only)	ASTM D2794	160 in. lb.
Dry Heat Resistance (topcoat only)	ASTM D2485	150°F (66°C), intermittent 250°F (121°C)
Flexibility	ASTM D522, 180° bend, 1/4" mandrel	Passes
Hot Tire Pick-up	ITM @ 140°F (60°C)	Passes
Pencil Hardness (topcoat only)	ASTM D3363	2H
Reverse Impact Resistance (topcoat only)	ASTM D2794	100 in. lb.
Scrub Resistance	ASTM 141-6192, 10,000 cycles	TBD
Slip Resistance, Floors	ASTM C1028, 0.60 minimum Static Coefficient of Friction	Pass dry with and without SharkGrip Additive; Pass wet with SharkGrip Additive

Resists splash, spillage, and fumes of dilute acids, alkalies, solvents, and fuels

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K

WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: January 8, 2015

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Concrete floors, unpainted:			
1 ct.	ArmorSeal Floor Plex 7100 Primer	1.5-2.0**	(40-50)
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)
Concrete floors, unpainted: Clear Only (B65C775)			
1 ct.	ArmorSeal 1K Urethane Clear, Reduced 10% by volume with water (minimum)	2.0	(50)
2 cts.	ArmorSeal 1K Urethane Clear (minimum)	2.0	(50)
Note: Three Coat System is required			
Concrete floors, previously painted:			
1 ct.	Spot prime bare areas with 1 ct. ArmorSeal Floor Plex 7100 Primer	1.5-2.0**	(40-50)
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)
Painted Surfaces in Sound Condition:			
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)

**At relative humidities above 75%, allow 16+ hours before topcoating ArmorSeal Floor-Plex 7100 Primer.

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:
*Concrete Masonry: SSPC13/NACE 6 **(or)** ICRI No. 310.2R, CSP 1-2

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Tint bases use EnviroToner Colorants at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Do not use Blend-A-Color toner

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	8.7 ± 0.2 lb/gal ; 1.04 Kg/L (Clear) 9.7 ± 0.2 lb/gal ; 1.16 Kg/L (White, Haze Gray), may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K

WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: January 8, 2015

Application Bulletin

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Surface Preparations

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-2. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

Application Conditions

Application Conditions

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Application Equipment

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up ..... Water

Brush
Brush.....Nylon/Polyester
Reduction.....As needed up to 10% by volume

Roller
Cover .....1/4"-3/8" woven with solvent resistant core
Reduction.....As needed up to 10% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

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ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: January 8, 2015

Application Bulletin

8.49

Application Procedures

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Clear Coat		Colors	
	Min.	Max.	Min.	Max.
Wet mils (microns)	**4.0** 100	**8.0** 200	**6.0** 150	**12.0** 300
Dry mils (microns)	**1.0** 25	**2.0** 50	**2.0** 50	**4.0** 100
~Coverage sq ft/gal (m^2/L)	**204** 5.0	**408** 10.0	**136** 3.3	**272** 6.6
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**544** (13.3)			

Apply by brush or roller only.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1.5 hours	45 minutes	25 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To recoat (self):			
minimum:	8 hours	6 hours	3 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before topcoating.
Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Clean Up Instructions

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

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Performance Tips

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

When using as a clear system (B65C775), please refer to the product data page: Recommended Systems. Three coats are required.

Excessive reduction of material can affect film build, appearance, and adhesion.

Drying time is temperature, humidity, and film thickness dependent.

Always test adhesion by applying a test patch of 2-3 square feet.

Allow to dry one week before checking adhesion.

Do not use hydrocarbon solvent for cleaning.

Anti-slip additives, such as H&C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

Refer to Product Information sheet for additional performance characteristics and properties.

Safety Precautions

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

Warranty

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Material Safety Data Sheets

MATERIAL SAFETY DATA SHEET

A24W8300
33 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A24W8300
PRODUCT NAME
LOXON® Concrete & Masonry Primer, Interior/Exterior Latex, White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
8	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
11	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
1	**1314-13-2**	**Zinc Oxide**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.92 lb/gal	1308 g/l
SPECIFIC GRAVITY	1.31	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	58%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.36 lb/gal	44 g/l	Less Water and Federally Exempt Solvents
0.16 lb/gal	19 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1314-13-2	**Zinc Oxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	1	1.0

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A24W351
29 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A24W351
PRODUCT NAME
LOXON® Masonry Coatings Systems Acrylic Coating, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
9	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
13	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
2	**1314-13-2**	**Zinc Oxide**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.47 lb/gal	1373 g/l
SPECIFIC GRAVITY	1.38	
BOILING POINT	212 - 500 °F	100 - 260 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	55%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.38 lb/gal	46 g/l	Less Water and Federally Exempt Solvents
0.18 lb/gal	21 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1314-13-2	**Zinc Oxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	2	1.7

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A76W51
11 00

DATE OF PREPARATION
Mar 24, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A76W51
PRODUCT NAME
SOLO™ Interior/Exterior 100% Acrylic, Semi-Gloss, Extra White
MANUFACTURER'S NAME
Manufactured by:
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115
Distributed by:
SHERWIN-WILLIAMS CANADA INC.
170 Brunel Rd
Mississauga, ON L4Z 1T5

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
0.1	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
18	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.16 lb/gal	1217 g/l
SPECIFIC GRAVITY	1.22	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	61%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.12 lb/gal	15 g/l	Less Water and Federally Exempt Solvents
0.04 lb/gal	5 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B66W611
11 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B66W611
PRODUCT NAME
PRO INDUSTRIAL™ Acrylic - Gloss, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
13	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	2*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.48 lb/gal	1135 g/l
SPECIFIC GRAVITY	1.14	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	64%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.00 lb/gal	0 g/l	Less Water and Federally Exempt Solvents
0.00 lb/gal	0 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
TOXICOLOGY DATA

CAS No.	Ingredient Name			
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD
Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.
US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A44W811
21 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A44W811
PRODUCT NAME
UltraCrete™ Medium Texture Masonry Topcoat, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
1	**64742-65-0**	**Heavy Paraffinic Oil**		
		ACGIH TLV	5 mg/m3 as Mist	
		OSHA PEL	5 mg/m3 as Mist	
5	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
5	**1332-58-7**	**Kaolin**		
		ACGIH TLV	Not Available	
		OSHA PEL	15 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
6	**93763-70-3**	**Perlite**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	15 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
5	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.44 lb/gal	1250 g/l
SPECIFIC GRAVITY	1.26	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	50%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.38 lb/gal	45 g/l	Less Water and Federally Exempt Solvents
0.19 lb/gal	23 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-65-0	**Heavy Paraffinic Oil**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1332-58-7	**Kaolin**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
93763-70-3	**Perlite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A5W651
05 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A5W651
PRODUCT NAME
SHERLASTIC® Elastomeric Masonry Coating System, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
4	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
0.3	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
13	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
1	**1314-13-2**	**Zinc Oxide**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Required for long or repeated contact.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.79 lb/gal	1292 g/l
SPECIFIC GRAVITY	1.30	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	58%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.21 lb/gal	25 g/l	Less Water and Federally Exempt Solvents
0.09 lb/gal	10 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1314-13-2	**Zinc Oxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	1	1.1

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A24W200
34 00

DATE OF PREPARATION
Mar 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A24W200
PRODUCT NAME
LOXON® Masonry Coating System Block Surfacer, White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	**107-21-1**	**Ethylene Glycol**		
		ACGIH TLV	100 MG/M3 CEILING (aerosol)	0.12 mm
		OSHA PEL	50 PPM CEILING	
24	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
4	**12001-26-2**	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	
7	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
1	**1314-13-2**	**Zinc Oxide**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:
- the liver
- the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.39 lb/gal	1125 g/l
SPECIFIC GRAVITY	1.13	
BOILING POINT	212 - 500 °F	100 - 260 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	44%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.71 lb/gal	85 g/l	Less Water and Federally Exempt Solvents
0.42 lb/gal	51 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
107-21-1	**Ethylene Glycol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		4700 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1314-13-2	**Zinc Oxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
107-21-1	Ethylene Glycol	3	
	Zinc Compound	1	0.8

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B50WZ4
24 00

DATE OF PREPARATION
Apr 8, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B50WZ4

PRODUCT NAME
KEM BOND® HS High Solids Alkyd Universal Metal Primer, Off White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
2	**100-41-4**	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
9	**1330-20-7**	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
1	**107-87-9**	**Methyl n-Propyl Ketone**		
		ACGIH TLV	150 PPM STEL	27.8 mm
		OSHA PEL	200 PPM	
		OSHA PEL	250 PPM STEL	
7	**110-43-0**	**Methyl n-Amyl Ketone**		
		ACGIH TLV	50 PPM	3.855 mm
		OSHA PEL	100 PPM	
0.2	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
5	**14807-96-6**	**Talc**		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
11	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
90 °F PMCC	1.0	8.7	RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IC

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.
To minimize the possibility of spontaneous combustion: control the accumulation of overspray; soak wiping rags and waste immediately after use in a water-filled, closed metal container; air dry filters outside, far from any combustible material and separated by bricks or other non-combustible spacers; dispose of all contaminated materials and waste properly. Consult OSHA 29 CFR 1910.107(b)(5) and NFPA 33, Chapter 8 (8-9) for the proper procedures.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	13.74 lb/gal	1646 g/l
SPECIFIC GRAVITY	1.65	
BOILING POINT	217 - 308 °F	102 - 153 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	37%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.58 lb/gal	310 g/l	Less Water and Federally Exempt Solvents
2.58 lb/gal	310 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.
Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
107-87-9	**Methyl n-Propyl Ketone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		1600 mg/kg
110-43-0	**Methyl n-Amyl Ketone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		1670 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)),
(ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG III, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (32 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (32 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	9	
	Zinc Compound	2	1.1

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B55WZ611
25 00

DATE OF PREPARATION
Mar 5, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B55WZ611

PRODUCT NAME
METALASTIC® DTM Acrylic Modified Enamel, Extra White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
14	**64742-88-7**	**Mineral Spirits 140-Flash**		
		ACGIH TLV	100 PPM	0.5 mm
		OSHA PEL	100 PPM	
0.7	**100-41-4**	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
4	**1330-20-7**	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
4	**14807-96-6**	**Talc**		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
14	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	2
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
123 °F PMCC	0.9	7.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION
Wear safety spectacles with unperforated sideshields.
OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	12.19 lb/gal	1460 g/l
SPECIFIC GRAVITY	1.47	
BOILING POINT	281 - 416 °F	138 - 213 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	38%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.60 lb/gal	311 g/l	Less Water and Federally Exempt Solvents
2.60 lb/gal	311 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Mineral Spirits 140-Flash**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (51 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (51 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.6	
1330-20-7	Xylene	4	
	Zinc Compound	3	1.3

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B54W151
17 00

DATE OF PREPARATION
Feb 24, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B54W151

PRODUCT NAME
PRO INDUSTRIAL Urethane Alkyd Enamel, Extra White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
25	**64742-88-7**	**Med. Aliphatic Hydrocarbon Solvent**		
		ACGIH TLV	100 PPM	1.27 mm
		OSHA PEL	100 PPM	
0.2	**100-41-4**	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
22	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	2
Reactivity	0

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
103 °F PMCC	1.0	6.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.
To minimize the possibility of spontaneous combustion: control the accumulation of overspray; soak wiping rags and waste immediately after use in a water-filled, closed metal container; air dry filters outside, far from any combustible material and separated by bricks or other non-combustible spacers; dispose of all contaminated materials and waste properly. Consult OSHA 29 CFR 1910.107(b)(5) and NFPA 33, Chapter 8 (8-9) for the proper procedures.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.75 lb/gal	1168 g/l
SPECIFIC GRAVITY	1.17	
BOILING POINT	300 - 395 °F	148 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	42%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.72 lb/gal	326 g/l	Less Water and Federally Exempt Solvents
2.71 lb/gal	325 g/l	Emitted VOC

VOLATILE ORGANIC COMPOUNDS (VOC - As Applied)

<2.81 lb/gal	<337 g/l	Less Water and Federally Exempt Solvents

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Med. Aliphatic Hydrocarbon Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.1	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B66W651
13 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B66W651
PRODUCT NAME
PRO INDUSTRIAL™ Acrylic - Semi-Gloss, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
13	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	2*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.53 lb/gal	1141 g/l
SPECIFIC GRAVITY	1.15	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	63%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.00 lb/gal	0 g/l	Less Water and Federally Exempt Solvents
0.00 lb/gal	0 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
TOXICOLOGY DATA

CAS No.	Ingredient Name			
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD
Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.
US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B66A50
23 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B66A50
PRODUCT NAME
DTM Bonding Primer, Off White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
11	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
4	**12001-26-2**	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	
9	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.18 lb/gal	1339 g/l
SPECIFIC GRAVITY	1.35	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	57%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.38 lb/gal	45 g/l	Less Water and Federally Exempt Solvents
0.17 lb/gal	20 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	3	1.5

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B58W610
24 00

DATE OF PREPARATION
Mar 5, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B58W610

PRODUCT NAME
MACROPOXY® 646 Fast Cure Epoxy Coating (Part A), Mill White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	100-41-4	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
15	1330-20-7	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
10	68410-23-1	**Polyamide**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
9	14807-96-6	**Talc**		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
31	13463-67-7	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	3*
Flammability	3
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Causes burns.
SKIN: Causes burns.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic skin reaction in susceptible persons or skin sensitization.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention **IMMEDIATELY**.
SKIN: Wash affected area thoroughly with soap and water.
If irritation persists or occurs later, get medical attention.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
85 °F PMCC	1.0	7.0	RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IC

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Do not get in eyes or on skin. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

To prevent eye contact, wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT

Use barrier cream on exposed skin.

OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	12.19 lb/gal	1460 g/l
SPECIFIC GRAVITY	1.47	
BOILING POINT	277 - 292 °F	136 - 144 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	29%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.11 lb/gal	253 g/l	Less Water and Federally Exempt Solvents
2.11 lb/gal	253 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
68410-23-1	**Polyamide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Ethylbenzene 1000 lb RQ
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)), (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG III, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (29 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (29 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene	15	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B65W611
22 00

DATE OF PREPARATION
Mar 5, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B65W611

PRODUCT NAME
ACROLON™ 218 HS Polyurethane - Gloss (Part A), Extra White/Tint Base

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
0.6	100-41-4	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
3	1330-20-7	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
2	64742-94-5	**Medium Aromatic Hydrocarbons**		
		ACGIH TLV	Not Available	0.12 mm
		OSHA PEL	Not Available	
0.2	91-20-3	**Naphthalene**		
		ACGIH TLV	10 PPM	1 mm
		ACGIH TLV	15 PPM STEL	
		OSHA PEL	10 PPM	
		OSHA PEL	15 PPM STEL	
5	78-93-3	**Methyl Ethyl Ketone**		
		ACGIH TLV	200 PPM	90.6 mm
		ACGIH TLV	300 PPM STEL	
		OSHA PEL	200 PPM	
		OSHA PEL	300 PPM STEL	
8	123-86-4	**n-Butyl Acetate**		
		ACGIH TLV	150 PPM	10 mm
		ACGIH TLV	200 PPM STEL	
		OSHA PEL	150 PPM	
		OSHA PEL	200 PPM STEL	
5	108-65-6	**1-Methoxy-2-Propanol Acetate**		
		ACGIH TLV	Not Available	1.8 mm
		OSHA PEL	Not Available	
15	14808-60-7	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
21	13463-67-7	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the hematopoietic (blood-forming) system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.
Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If any breathing problems occur during use, **LEAVE THE AREA** and get fresh air. If problems remain or occur later, **IMMEDIATELY** get medical attention.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
55 °F PMCC	0.8	13.1	RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturers directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. **NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.**
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION
Wear safety spectacles with unperforated sideshields.
OTHER PROTECTIVE EQUIPMENT
Use barrier cream on exposed skin.
OTHER PRECAUTIONS
This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.34 lb/gal	1358 g/l
SPECIFIC GRAVITY	1.36	
BOILING POINT	174 - 415 °F	78 - 212 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	40%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.90 lb/gal	348 g/l	Less Water and Federally Exempt Solvents
2.90 lb/gal	348 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
Methyl Ethyl Ketone may increase the nervous system effects of other solvents.
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Naphthalene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals.
Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.
Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
64742-94-5	**Medium Aromatic Hydrocarbons**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
91-20-3	**Naphthalene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
78-93-3	**Methyl Ethyl Ketone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		2740 mg/kg
123-86-4	**n-Butyl Acetate**			
		LC50 RAT	4HR	2000 ppm
		LD50 RAT		13100 mg/kg
108-65-6	**1-Methoxy-2-Propanol Acetate**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		8500 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Naphthalene 100 lb RQ
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG II, (XYLENES (ISOMERS AND MIXTURE)),
(ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG II, (13 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG II, (13 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.5	
1330-20-7	Xylene	3	
91-20-3	Naphthalene	0.2	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B66W310
32 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B66W310
PRODUCT NAME
PRO INDUSTRIAL™ PRO-CRYL® Universal Acrylic Primer, Off White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	29911-28-2	**1-(2-Butoxymethylethoxy)-propanol**		
		ACGIH TLV	Not Available	0.06 mm
		OSHA PEL	Not Available	
13	1317-65-3	**Calcium Carbonate**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
10	13463-67-7	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.23 lb/gal	1225 g/l
SPECIFIC GRAVITY	1.23	
BOILING POINT	212 - 449 °F	100 - 231 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	63%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.80 lb/gal	96 g/l	Less Water and Federally Exempt Solvents
0.32 lb/gal	39 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
29911-28-2	**1-(2-Butoxymethylethoxy)-propanol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1317-65-3	**Calcium Carbonate**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Zinc Compound	1	0.8

CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A74W51
11 00

DATE OF PREPARATION
Mar 5, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A74W51
PRODUCT NAME
SOLO™ Interior/Exterior 100% Acrylic, Flat, Extra White
MANUFACTURER'S NAME
Manufactured by:
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115
Distributed by:
SHERWIN-WILLIAMS CANADA INC.
170 Brunel Rd
Mississauga, ON L4Z 1T5

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
0.6	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
13	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.05 lb/gal	1323 g/l
SPECIFIC GRAVITY	1.33	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	60%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.21 lb/gal	25 g/l	Less Water and Federally Exempt Solvents
0.08 lb/gal	10 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B50WZ30
17 00

DATE OF PREPARATION
Mar 8, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B50WZ30

PRODUCT NAME
GALVITE™ HS, Off White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
5	**64742-94-5**	**Medium Aromatic Hydrocarbons**		
		ACGIH TLV	Not Available	0.12 mm
		OSHA PEL	Not Available	
0.7	**91-20-3**	**Naphthalene**		
		ACGIH TLV	10 PPM	1 mm
		ACGIH TLV	15 PPM STEL	
		OSHA PEL	10 PPM	
		OSHA PEL	15 PPM STEL	
12	**110-43-0**	**Methyl n-Amyl Ketone**		
		ACGIH TLV	50 PPM	3.855 mm
		OSHA PEL	100 PPM	
3	**123-86-4**	**n-Butyl Acetate**		
		ACGIH TLV	150 PPM	10 mm
		ACGIH TLV	200 PPM STEL	
		OSHA PEL	150 PPM	
		OSHA PEL	200 PPM STEL	
0.2	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
2	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
9	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	2
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the hematopoietic (blood-forming) system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
104 °F PMCC	0.8	7.9	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	13.29 lb/gal	1592 g/l
SPECIFIC GRAVITY	1.60	
BOILING POINT	255 - 415 °F	123 - 212 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	39%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.75 lb/gal	329 g/l	Less Water and Federally Exempt Solvents
2.75 lb/gal	329 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Naphthalene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-94-5	**Medium Aromatic Hydrocarbons**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
91-20-3	**Naphthalene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
110-43-0	**Methyl n-Amyl Ketone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		1670 mg/kg
123-86-4	**n-Butyl Acetate**			
		LC50 RAT	4HR	2000 ppm
		LD50 RAT		13100 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Naphthalene 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (40 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
91-20-3	Naphthalene	0.7	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B66W1251
09 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B66W1251
PRODUCT NAME
PRO INDUSTRIAL™ DTM Acrylic Eg-Shel, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
0.1	**119-61-9**	**Benzophenone**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
< 0.1	**Proprietary**	**Fluoropolymer**		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
0.1	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
17	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

HMIS Codes

Health	2*
Flammability	0
Reactivity	0

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.61 lb/gal	1271 g/l
SPECIFIC GRAVITY	1.28	
BOILING POINT	212 - 500 °F	100 - 260 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	57%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.27 lb/gal	33 g/l	Less Water and Federally Exempt Solvents
0.12 lb/gal	14 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
119-61-9	**Benzophenone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
Proprietary	**Fluoropolymer**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

20-475
08 00

DATE OF PREPARATION
Apr 7, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
20-475
PRODUCT NAME
UNIFLEX® 500 Aluminum Roof Coating
MANUFACTURER'S NAME
KST Coatings
A Business Unit of the Sherwin-Williams Co.
101 W. Prospect Avenue
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(888) 321-3539 www.uniflexroof.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
27	**64742-88-7**	**Med. Aliphatic Hydrocarbon Solvent**		
		ACGIH TLV	100 PPM	1.27 mm
		OSHA PEL	100 PPM	
4	**64742-82-1**	**Heavy Aliphatic Solvent**		
		ACGIH TLV	Not Available	2 mm
		OSHA PEL	Not Available	
9	**64741-41-9**	**Heavy Petroleum Naphtha**		
		ACGIH TLV	500 PPM	2 mm
		OSHA PEL	Not Available	
28	**8052-42-4**	**Asphalt (Petroleum)**		
		ACGIH TLV	0.5 MG/M3	
		OSHA PEL	Not Available	
1	**7631-86-9**	**Amorphous Silica**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	6 mg/m3 as Dust	
18	**12001-26-2**	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2
Flammability	2
Reactivity	1

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
105 °F PMCC	0.8	6.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	8.93 lb/gal	1070 g/l
SPECIFIC GRAVITY	1.07	
BOILING POINT	287 - 415 °F	141 - 212 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	55%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.52 lb/gal	422 g/l	Less Water and Federally Exempt Solvents
3.52 lb/gal	422 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Med. Aliphatic Hydrocarbon Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-82-1	**Heavy Aliphatic Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64741-41-9	**Heavy Petroleum Naphtha**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
8052-42-4	**Asphalt (Petroleum)**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
7631-86-9	**Amorphous Silica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

Bulk Containers may be Shipped as:

UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (41 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (41 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B59S11
26 00

DATE OF PREPARATION
Jul 19, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B59S11

PRODUCT NAME
SILVER-BRITE® Aluminum Paint

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
45	**64742-88-7**	**Med. Aliphatic Hydrocarbon Solvent**		
		ACGIH TLV	100 PPM	1.27 mm
		OSHA PEL	100 PPM	
3	**108-88-3**	**Toluene**		
		ACGIH TLV	20 PPM	22 mm
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2
Flammability	2
Reactivity	1

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
108 °F PMCC	1.0	7.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
DOL Storage Class II
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.
OTHER PRECAUTIONS
Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	7.87 lb/gal	942 g/l
SPECIFIC GRAVITY	0.95	
BOILING POINT	222 - 395 °F	105 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	58%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.76 lb/gal	451 g/l	Less Water and Federally Exempt Solvents
3.76 lb/gal	451 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Med. Aliphatic Hydrocarbon Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
108-88-3	**Toluene**			
		LC50 RAT	4HR	4000 ppm
		LD50 RAT		5000 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.

UN1263, PAINT, 3, PG III, (ERG#128)

Bulk Containers may be Shipped as:

UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (42 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	3	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B59A303
16 00

DATE OF PREPARATION
Jan 7, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B59A303

PRODUCT NAME
KEM® Hi-Temp HEAT-FLEX® II 450 High Performance Heat Resistant Coating, Shale Gray

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units		Vapor Pressure
9	**108-88-3**	**Toluene**			
		ACGIH TLV	20	PPM	22 mm
		OSHA PEL	100	ppm (Skin)	
		OSHA PEL	150	ppm (Skin) STEL	
2	**100-41-4**	**Ethylbenzene**			
		ACGIH TLV	20	PPM	7.1 mm
		OSHA PEL	100	PPM	
		OSHA PEL	125	PPM STEL	
9	**1330-20-7**	**Xylene**			
		ACGIH TLV	100	PPM	5.9 mm
		ACGIH TLV	150	PPM STEL	
		OSHA PEL	100	PPM	
		OSHA PEL	150	PPM STEL	
2	**64742-95-6**	**Light Aromatic Hydrocarbons**			
		ACGIH TLV		Not Available	3.8 mm
		OSHA PEL		Not Available	
3	**95-63-6**	**1,2,4-Trimethylbenzene**			
		ACGIH TLV	25	PPM	2.03 mm
		OSHA PEL	25	PPM	
6	**71-36-3**	**1-Butanol**			
		ACGIH TLV	20	PPM	5.5 mm
		OSHA PEL	50	ppm (Skin) CEILING	
10	**13463-67-7**	**Titanium Dioxide**			
		ACGIH TLV	10	mg/m3 as Dust	
		OSHA PEL	10	mg/m3 Total Dust	
		OSHA PEL	5	mg/m3 Respirable Fraction	
2	**68186-91-4**	**Copper Chromite Black Spinel**			
		ACGIH TLV	0.5	MG/M3	
		OSHA PEL	0.5	MG/M3	
2	**8007-18-9**	**Nickel Antimony Titanate**			
		ACGIH TLV	0.5	MG/M3	
		OSHA PEL	0.5	MG/M3	

% by Weight	Ingredient
1.23	Chromium III (as Cr)

SECTION 3 — HAZARDS IDENTIFICATION

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
71 °F PMCC	0.7	11.2	RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particulate respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section 2.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.60 lb/gal	1269 g/l
SPECIFIC GRAVITY	1.28	
BOILING POINT	222 - 360 °F	105 - 182 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	49%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.48 lb/gal	418 g/l	Less Water and Federally Exempt Solvents
3.48 lb/gal	418 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide , Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Limited evidence exists linking certain Nickel compounds to cancer in animals and possibly humans, however no direct evidence exists that Nickel Antimony Titanate is carcinogenic.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

Chromium III is considered the active species in cancer induction, but Chromium III compounds do not cross the cell wall. However, there is some evidence that Chromium III compounds of respirable particle size may be taken up by the cells in the lung.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
108-88-3	**Toluene**			
		LC50 RAT	4HR	4000 ppm
		LD50 RAT		5000 mg/kg
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
64742-95-6	**Light Aromatic Hydrocarbons**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
95-63-6	**1,2,4-Trimethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
71-36-3	**1-Butanol**			
		LC50 RAT	4HR	8000 ppm
		LD50 RAT		790 mg/kg
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
68186-91-4	**Copper Chromite Black Spinel**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
8007-18-9	**Nickel Antimony Titanate**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		499.9 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability and extractability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Toluene 1000 lb RQ
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG II, (XYLENES (ISOMERS AND MIXTURE)),
(ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG II, (22 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	9	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	9	
95-63-6	1,2,4-Trimethylbenzene	3	
71-36-3	1-Butanol	6	
	Chromium Compound	2	1.2
	Manganese Compound	2	0.03
	Nickel Compound	2	0.3
	Copper Compound	2	0.4
	Antimony Compound	2	0.7

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B69VZ12
12 00

DATE OF PREPARATION
Dec 26, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B69VZ12

PRODUCT NAME
ZINC CLAD® II PLUS Inorganic Zinc Rich Coating (Part A), Gray-Green / Base

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	64742-94-5	**Medium Aromatic Hydrocarbons**		
		ACGIH TLV	Not Available	0.12 mm
		OSHA PEL	Not Available	
0.5	91-20-3	**Naphthalene**		
		ACGIH TLV	10 PPM	1 mm
		ACGIH TLV	15 PPM STEL	
		OSHA PEL	10 PPM	
		OSHA PEL	15 PPM STEL	
6	64-17-5	**Ethanol**		
		ACGIH TLV	1000 PPM	44 mm
		OSHA PEL	1000 PPM	
3	34590-94-8	**2-Methoxymethylethoxypropanol**		
		ACGIH TLV	100 ppm (Skin)	0.4 mm
		ACGIH TLV	150 ppm (Skin) STEL	
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
5	110-43-0	**Methyl n-Amyl Ketone**		
		ACGIH TLV	50 PPM	3.855 mm
		OSHA PEL	100 PPM	
17	78-10-4	**Ethyl Silicate**		
		ACGIH TLV	Not Available	1 mm
		OSHA PEL	100 PPM	
21	14808-60-7	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
4	7631-86-9	**Amorphous Silica**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	6 mg/m3 as Dust	
6	12001-26-2	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic skin reaction in susceptible persons.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
65 °F PMCC	0.8	19.0	RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.70 lb/gal	1282 g/l
SPECIFIC GRAVITY	1.29	
BOILING POINT	172 - 415 °F	77 - 212 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	50%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.69 lb/gal	442 g/l	Less Water and Federally Exempt Solvents
3.69 lb/gal	442 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Naphthalene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-94-5	**Medium Aromatic Hydrocarbons**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
91-20-3	**Naphthalene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64-17-5	**Ethanol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		7060 mg/kg
34590-94-8	**2-Methoxymethylethoxypropanol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		5135 mg/kg
110-43-0	**Methyl n-Amyl Ketone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		1670 mg/kg
78-10-4	**Ethyl Silicate**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		6270 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
7631-86-9	**Amorphous Silica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Naphthalene 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, 3, PG II, (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, LIMITED QUANTITY, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG II, (18 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
91-20-3	Naphthalene	0.5	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B59S8
15 00

DATE OF PREPARATION
Jul 19, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B59S8

PRODUCT NAME
SILVER-BRITE® Aluminum Paint, Hi-Heat Silicone Alkyd

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
10	**64742-88-7**	**Med. Aliphatic Hydrocarbon Solvent**		
		ACGIH TLV	100 PPM	1.27 mm
		OSHA PEL	100 PPM	
2	**100-41-4**	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
13	**1330-20-7**	**Xylene**		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
13	**64742-95-6**	**Light Aromatic Hydrocarbons**		
		ACGIH TLV	Not Available	3.8 mm
		OSHA PEL	Not Available	
2	**98-82-8**	**Cumene**		
		ACGIH TLV	50 PPM	10 mm
		OSHA PEL	50 PPM	
1	**526-73-8**	**1,2,3-Trimethylbenzene**		
		ACGIH TLV	Not Available	0.931 mm
		OSHA PEL	Not Available	
4	**108-67-8**	**1,3,5-Trimethylbenzene**		
		ACGIH TLV	25 PPM	2 mm
		OSHA PEL	25 PPM	
14	**95-63-6**	**1,2,4-Trimethylbenzene**		
		ACGIH TLV	25 PPM	2.03 mm
		OSHA PEL	25 PPM	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	2
Reactivity	1

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
103 °F PMCC	0.7	7.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.19 lb/gal	1101 g/l
SPECIFIC GRAVITY	1.11	
BOILING POINT	277 - 395 °F	136 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	74%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

5.32 lb/gal	637 g/l	Less Water and Federally Exempt Solvents
5.32 lb/gal	637 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

Contamination with Water, Acids, or Alkalis can cause evolution of hydrogen, which may result in dangerously increased pressures in closed containers.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Med. Aliphatic Hydrocarbon Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	**Xylene**			
		LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
64742-95-6	**Light Aromatic Hydrocarbons**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
98-82-8	**Cumene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		1400 mg/kg
526-73-8	**1,2,3-Trimethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
108-67-8	**1,3,5-Trimethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
95-63-6	**1,2,4-Trimethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

RQ, UN1263, PAINT, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)),
(ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	13	
98-82-8	Cumene	2	
95-63-6	1,2,4-Trimethylbenzene	14	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

Y24W8020
34 00

DATE OF PREPARATION
Mar 18, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
Y24W8020
PRODUCT NAME
Exterior Oil-Based Wood Primer, White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
19	**64742-88-7**	**Med. Aliphatic Hydrocarbon Solvent**		
		ACGIH TLV	100 PPM	1.27 mm
		OSHA PEL	100 PPM	
3	**64742-88-7**	**Mineral Spirits 140-Flash**		
		ACGIH TLV	100 PPM	0.5 mm
		OSHA PEL	100 PPM	
0.2	**100-41-4**	**Ethylbenzene**		
		ACGIH TLV	20 PPM	7.1 mm
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
0.3	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
3	**14464-46-1**	**Cristobalite**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.05 mg/m3 as Resp. Dust	
1	**12001-26-2**	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	
15	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

HMIS Codes

Health	2*
Flammability	2
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
115 °F PMCC	0.9	6.0	Combustible, Flash above 99 and below 200 °F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.42 lb/gal	1368 g/l
SPECIFIC GRAVITY	1.37	
BOILING POINT	300 - 416 °F	148 - 213 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	41%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.64 lb/gal	317 g/l	Less Water and Federally Exempt Solvents
2.64 lb/gal	317 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
64742-88-7	**Med. Aliphatic Hydrocarbon Solvent**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-88-7	**Mineral Spirits 140-Flash**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
100-41-4	**Ethylbenzene**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (46 C c.c.), EmS F-E, S-E

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
UN1263, PAINT, CLASS 3, PG III, (46 C c.c.), EmS F-E, S-E

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.1	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A15W51
26 00

DATE OF PREPARATION
Mar 24, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A15W51

PRODUCT NAME
WOODSCAPES® Acrylic Solid Color Exterior House Stain, Extra White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units		Vapor Pressure
1	**107-21-1**	**Ethylene Glycol**			
		ACGIH TLV	100	MG/M3 CEILING (aerosol)	0.12 mm
		OSHA PEL	50	PPM CEILING	
0.1	**14808-60-7**	**Quartz**			
		ACGIH TLV	0.025	mg/m3 as Resp. Dust	
		OSHA PEL	0.1	mg/m3 as Resp. Dust	
1.0	**14464-46-1**	**Cristobalite**			
		ACGIH TLV	0.025	mg/m3 as Resp. Dust	
		OSHA PEL	0.05	mg/m3 as Resp. Dust	
6	**14807-96-6**	**Talc**			
		ACGIH TLV	2	mg/m3 as Resp. Dust	
		OSHA PEL	2	mg/m3 as Resp. Dust	
12	**13463-67-7**	**Titanium Dioxide**			
		ACGIH TLV	10	mg/m3 as Dust	
		OSHA PEL	10	mg/m3 Total Dust	
		OSHA PEL	5	mg/m3 Respirable Fraction	
2	**1314-13-2**	**Zinc Oxide**			
		ACGIH TLV		Not Available	
		OSHA PEL		Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2*
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.91 lb/gal	1306 g/l
SPECIFIC GRAVITY	1.31	
BOILING POINT	212 - 388 °F	100 - 197 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	66%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.71 lb/gal	85 g/l	Less Water and Federally Exempt Solvents
0.25 lb/gal	30 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
107-21-1	**Ethylene Glycol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		4700 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14464-46-1	**Cristobalite**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1314-13-2	**Zinc Oxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
107-21-1	Ethylene Glycol	1	
	Zinc Compound	2	1.8

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B51W620
15 00

DATE OF PREPARATION
Feb 23, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B51W620
PRODUCT NAME
PrepRite® ProBlock® Interior/Exterior Latex Primer/Sealer, White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
6	**14807-96-6**	**Talc**		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
15	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.89 lb/gal	1304 g/l
SPECIFIC GRAVITY	1.31	
BOILING POINT	212 - 213 °F	100 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	63%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.00 lb/gal	0 g/l	Less Water and Federally Exempt Solvents

0.00 lb/gal 0 g/l Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
TOXICOLOGY DATA

CAS No.	Ingredient Name			
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD
Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.
US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

A15T5
21 00

DATE OF PREPARATION
Mar 24, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
A15T5

PRODUCT NAME
WOODSCAPES® Semi-Transparent Polyurethane Exterior House Stain, Clear Base

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
4	**107-21-1**	**Ethylene Glycol**		
		ACGIH TLV	100 MG/M3 CEILING (aerosol)	0.12 mm
		OSHA PEL	50 PPM CEILING	
1	**14807-96-6**	**Talc**		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	2
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:
- the liver
- the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	8.54 lb/gal	1023 g/l
SPECIFIC GRAVITY	1.03	
BOILING POINT	212 - 388 °F	100 - 197 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	91%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

3.52 lb/gal	422 g/l	Less Water and Federally Exempt Solvents
0.49 lb/gal	59 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
107-21-1	**Ethylene Glycol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		4700 mg/kg
14807-96-6	**Talc**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
107-21-1	Ethylene Glycol	4	

CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B90W110
17 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B90W110

PRODUCT NAME
ARMORSEAL® TREAD-PLEX Primer Water Based Acrylic Floor Coating, Off White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	**34590-94-8**	**2-Methoxymethylethoxypropanol**		
		ACGIH TLV	100 ppm (Skin)	0.4 mm
		ACGIH TLV	150 ppm (Skin) STEL	
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
13	**14808-60-7**	**Quartz**		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
2	**1332-58-7**	**Kaolin**		
		ACGIH TLV	Not Available	
		OSHA PEL	15 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
7	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
200 °F PMCC	1.1	14.0	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IIIB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.16 lb/gal	1337 g/l
SPECIFIC GRAVITY	1.34	
BOILING POINT	212 - 357 °F	100 - 180 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	57%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.82 lb/gal	99 g/l	Less Water and Federally Exempt Solvents
0.39 lb/gal	46 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
34590-94-8	**2-Methoxymethylethoxypropanol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		5135 mg/kg
14808-60-7	**Quartz**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
1332-58-7	**Kaolin**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B90W111
17 00

DATE OF PREPARATION
Feb 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B90W111

PRODUCT NAME
ARMORSEAL® TREAD-PLEX Water Based Acrylic Floor Coating, Extra White

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	**34590-94-8**	**2-Methoxymethylethoxypropanol**		
		ACGIH TLV	100 ppm (Skin)	0.4 mm
		ACGIH TLV	150 ppm (Skin) STEL	
		OSHA PEL	100 ppm (Skin)	
		OSHA PEL	150 ppm (Skin) STEL	
12	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.82 lb/gal	1296 g/l
SPECIFIC GRAVITY	1.30	
BOILING POINT	212 - 357 °F	100 - 180 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	57%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.81 lb/gal	97 g/l	Less Water and Federally Exempt Solvents
0.38 lb/gal	46 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable
CONDITIONS TO AVOID
None known.
INCOMPATIBILITY
None known.
HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION
Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
TOXICOLOGY DATA

CAS No.	Ingredient Name			
34590-94-8	**2-Methoxymethylethoxypropanol**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		5135 mg/kg
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD
Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.
US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B65W775
19 00

DATE OF PREPARATION
Mar 25, 2015

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
B65W775
PRODUCT NAME
ARMORSEAL® 1K Waterbased Urethane Floor Enamel, Extra White
MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 524-5979 www.sherwin-williams.com
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
1	**121-44-8**	**Triethylamine**		
		ACGIH TLV	1 ppm (Skin)	54 mm
		ACGIH TLV	3 ppm (Skin) STEL	
		OSHA PEL	25 ppm (Skin)	
		OSHA PEL	100 ppm (Skin) STEL	
8	**872-50-4**	**1-Methyl-2-Pyrrolidone**		
		ACGIH TLV	Not Available	1 mm
		OSHA PEL	Not Available	
9	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	3*
Flammability	0
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	Not Applicable	Not Applicable	Not Applicable

EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Alcohol Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate the area.
Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY
Not Applicable
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE
Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).
VENTILATION
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.
RESPIRATORY PROTECTION
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.
PROTECTIVE GLOVES
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.
EYE PROTECTION
Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.24 lb/gal	1107 g/l
SPECIFIC GRAVITY	1.11	
BOILING POINT	185 - 396 °F	85 - 202 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	65%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	> 2.0, < 11.5	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.14 lb/gal	257 g/l	Less Water and Federally Exempt Solvents
1.00 lb/gal	120 g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide , Oxides of Nitrogen, possibility of Hydrogen Cyanide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
121-44-8	**Triethylamine**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		460 mg/kg
872-50-4	**1-Methyl-2-Pyrrolidone**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		4200 mg/kg
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)
Not Regulated for Transportation.
Canada (TDG)
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IMO
Not Regulated for Transportation.
IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
121-44-8	Triethylamine	1	
872-50-4	1-Methyl-2-Pyrrolidone	8	

CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.