

## **APPENDIX E**

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### **TECHNICAL DATA SHEETS AND MATERIAL SAFETY DATA SHEETS**

## **APPENDIX E – TDS AND MSDS**

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This appendix contains the Technical Data Sheets (TDS) and Material Safety Data Sheets (MSDS) for those products sited in Chapter III – Control Technology.

BonaTech MEGA® Brand Floor Finish  
X-6697 Semi-Gloss Aquathane Waterborne Floor  
275 Multi-Purpose Ultra Clear Urethane  
355 Waterborne Acrylic Varnish  
WOODPRIDE™ Interior Waterborne Aquacrylic Gloss Varnish  
Geocel 9500™MB – Elastomeric Coating for Metal Buildings  
Roof Mate The Roof Preservation System  
Roof Mate High Solids 100% Acrylic Elastomer  
Tropical Asphalt #113 Hydro-Aluminum  
Tropical Asphalt #360 Asphalt Emulsion  
ProMar® Exterior Solid Color Acrylic Latex Stain A16 Series  
4301 Exterior Acrylic Solid Color Rustic Stain  
ACRI-FLAT® W 704  
Okon DECK STAIN, OK-720  
Woodtech Solid Color Pre-Stain, 09-870  
Kemiko Transparent Stain  
Best Grade 105 Wiping Stain  
ZVOC® Exterior Waterbased Stain  
ACRYLASTIC 490  
THOROCOAT® DOT  
EVERCOAT 7000S High Modulus Waterproof Coating  
VIP1550 CONCENTRATED WATER REPELLANT  
Aquapel & Aquapel Plus  
Blok-Lok® Clear Water Repellent  
ConFlex XL Texture High Build, A5-800 Series  
Clear Elastomeric Waterproofing Sealer (2571-70)  
TK-1311WB Silane Concentrate



# Mega™



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## DESCRIPTION:

MEGA is the revolutionary, oxygen-crosslinking, waterborne wood floor finish for use on heavy-traffic interior residential and commercial floors.

MEGA's unique OCP (Oxygen-Crosslinking Polyurethane) formula uses the oxygen in the air as the crosslinker. MEGA is the world's leading waterborne finish, providing exceptional durability, beauty and value.

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## FEATURES:

- Oxygen-crosslinking, 100% polyurethane waterborne formula with extraordinary performance, ease of application and durability
- No limited pot life and no wasted finish
- Natural wood color enhances the beauty of the wood
- Exceptional build and clarity
- Excellent flow and leveling
- Available in gloss, semi-gloss or satin
- VOC compliant - VOC does not exceed 250 grams per liter
- Fast drying - Approximately 2-3 hours
- Nonflammable and virtually odorless
- Water clean-up

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## RECOMMENDED USE:

- Heavy-traffic residential—kitchens, entry ways, family rooms, homes with pets, children and high foot traffic
- Commercial—restaurants, offices, retail stores
- Hospitals, schools and universities, nursing homes



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## DIRECTIONS FOR USE:

**BEFORE USING, READ ALL DIRECTIONS AND MATERIAL SAFETY DATA SHEET #80060 (GLOSS) OR #80063 (SATIN AND SEMI-GLOSS) FOR THIS PRODUCT.**

MEGA™ is the Environmental Choice. The Environmental Choice® Seal is a registered trademark of BonaKemi USA, Inc. and represents a waterbased formula which meets or exceeds all state and federal clean air quality standards. Available in Gloss, Semi-Gloss or Satin. Nonflammable.

NOTE: MEGA finish will appear slightly amber on white, bleached or pastel floors. Always prepare a sample or test area to determine actual appearance. For a colorless finish on these types of floors, use Bona Strong™ or Traffic™ brand floor finish.

Use directly from container. Do not thin. Non-photochemically reactive (Not an ozone precursor). KEEP FROM FREEZING.

**RECOATING EXISTING FLOORS** 1. Be sure floor is free from wax or oily residue. 2. Use Bona Prep™ system (see label for directions). 3. Apply 1-2 coats of Mega (see finish directions).

**NOTE:** Mega will adhere to most stains and finishes after proper preparation and dry times. **Always prepare a sample or test area to determine compatibility.**

**SANDING AND FINISHING NEW FLOORS** 1. Sand and prepare floor using NOFMA-accepted methods. 2. For a stained floor, make your final cut with 80-grit paper and screen with 80 - 100-grit screen. Apply Bona® DriFast™ Stain. For an unstained floor, make your final cut with 80 - 100-grit paper and screen to 120 - 150 grit. This burnishing will reduce the amount of grain raise. 3. Use Tampico Brush on buffer and vacuum thoroughly. 4. Tack with a dry Bona® microfiber mop or cloth. 5. Apply sealer and finish system (see finish directions).

THE MEGA SYSTEM IS A 3-COAT SYSTEM: 1 coat Bonaseal® (the use of Bonaseal® minimizes the possibility of sidebonding and tannin bleed) and 2 coats of MEGA. Adding a third coat of finish is recommended in heavy-traffic commercial and residential areas.

**NOTE:** Use a clean applicator for sealer and a separate clean applicator for finish.

**INTERCOAT ABRASION:** Abrading between sealer or finish coats is not necessary for adhesion unless it has been more than 48 hours since the previous coat has been applied. However, for smoothest results, abrade the Bonaseal® sealer coat with a Bona® Conditioning Pad and 2 siafast Delta Sheets to eliminate any grain raise. The Delta Sheets are to be used for abrading Bonaseal® only. Abrade prior to the final finish coat with just the Bona® Conditioning Pad. **Always vacuum and tack thoroughly with a slightly water-dampened Bona® microfiber mop or cloth after abrading.**

**FINISHING: SHAKE WELL BEFORE USING.** 1. Pour a 4" wide line of the finish along the starting wall. Go with the grain of the wood. 2. Using a clean, pre-dampened applicator, draw the applicator forward, with the grain of the wood, moving the finish toward the opposite wall. Holding the applicator at a "snowplow" angle will maintain a wet edge at all times. 3. At the end of each run, turn the applicator toward you and pad out the applicator parallel to the wet edge. 4. Feather out all turns. If pushed too hard or too fast, drips will fly off the applicator. 5. Missed areas can be touched up if seen right away. 6. To prevent lapping and dry marks, be sure you are using the recommended coverage of 500-600 sq. ft. per gallon. Be careful not to spread the finish too thin. 7. Allow your first coat to dry 2-3 hours. High humidity and/or low temperatures will extend the drying time. For smoothest results, before applying final coat, abrade with a Bona® Conditioning Pad. **Always vacuum and tack thoroughly with a slightly water-dampened Bona® microfiber mop or cloth after abrading. Allow final coat to dry at least 48 hours before use.**

**CURING:** The curing process takes approximately 7 days. Do not replace area rugs until the floor has fully cured. The floor may be walked on after 24 hours, but the floor is susceptible to scuffing or marring prior to completion of the curing time. Do not use cleaner during this 7 day curing time. Use only a dry Bona® microfiber mop or cloth for cleaning during the first week.

**CLEAN-UP:** Tools should be cleaned with water and stored in the Bona® Applicator Storage Canister.

**MAINTENANCE:** Put walk-off mats at all entrance doorways to keep out excessive dirt and grit. Sweep or vacuum daily and damp wipe as needed with Bona® Swedish Formula® Hardwood Floor Cleaner.

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## SPECIFICATIONS/PHYSICAL DATA:

### *Physical Characteristics:*

**Ingredients:** Gloss - Water, polyurethane resin, N-Methyl-2-Pyrrolidone and Dipropylene Glycol Monopropyl Ether.

Satin and Semi-Gloss - Water, polyurethane resin, N-Methyl-2-Pyrrolidone, Dipropylene Glycol Monomethyl Ether and flattening agent.

**Color** - Milky white (wet)

**Odor** - Non-offending

**pH** - 7.9

**Stability** - 1 year shelf life in unopened container

**Solids** - 32.5%

**Viscosity** - (#4 Ford cup @ 25° C) 18 seconds

**Density** - 8.75 lbs./gallon (1.05 S.G.)

**Gloss Level (60°)** - >90 for gloss, 40-45 for semi-gloss, 25-30 for satin

**VOC Compliant** - Does not exceed 250 grams per liter (2.1 lbs. per gallon VOC)

### *Application Characteristics:*

**Clarity** - Clear when dry

**Coverage** - 500-600 square feet per gallon

**Leveling** - Excellent

**Defoaming** - Excellent

**Drying Time** - 2-3 hours

**Percent Cured After 24 Hours** - 70%

**Maximum Cure** - 100% after 1 week

**Application Tools** - Bona® Brush, flocked foam Bona® Swivel Head Floor Coater, Bona® Swedish Roller

**Packaging** - 1-gallon plastic bottle

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## BonaKemi USA, Inc.

14805 E. Moncrieff Place, Aurora, CO 80011-1207 • (303) 371-1411 • (800) 872-5515 • FAX (303) 371-6958 • www.bonakemi.com  
Item #1671 © 04/03 BonaKemi USA, Inc.



**FARWEST PAINT PRODUCT INFORMATION*****Varnish Coatings*****X-6697 Semi-Gloss Aquathane Waterborne Floor Finish**

**COLOR(S):** Clear and Tints.

**PRODUCT TYPE:** Modified Aliphatic Urethane Dispersion.

**DESCRIPTION:** A waterborne, easy-to-apply complete wood finishing system. Grain raise and dry finish are not a problem and, in most cases, stain and finish may be recoated within one hour or less. The solids content in this system is higher than conventional nitrocellulose lacquers or oil-based stains making film build and aesthetic looks better than conventional systems. This is a high quality aliphatic urethane which is non-yellowing, highly durable and stain resistant.

**Intended Use:** Primarily designed as a high abrasion resistant coating for hardwood floors; but is widely used for kitchen cabinets, coffee tables, fine wood furniture, table tops, clear wood trim varnish, etc.

**PHYSICAL CHARACTERISTICS**

**VISCOSITY:** 13-17" (FORD #4)

**DRY TO TOUCH:** 30-45 minutes

**WEIGHT SOLIDS:** 30-32%

**TACK FREE:** 2 hours

**VOLUME SOLIDS:** 26-28%

**TIME TO RECOAT:** 3 hours

**WEIGHT PER GALLON:** 8.50 lbs. per gal.

**DRY HARD:** 3 hours

**V.O.C.:** 186 grams per liter

**COLOR RANGE:** Clear and Tints

**FLASH POINT:** N/A.

**PACKAGING:** 1 or 5 gallon containers

**BATCH:** Stock

**PRACTICAL COVERAGE:** 250-350 square feet per gallon depending on surface to be coated.

**SURFACE PREPARATION:** The surface to be coated must be clean, dry and free of oil, dirt and grease. For best results, the surface should be thoroughly smooth sanded before applying the first coat of color or finish.

**APPLICATION:**

Farwest Paint Manufacturing Co.  
4522 South 133rd Street  
Tukwila, Washington, 98168  
<http://www.farwestpaintmfg.com>

**Material Safety Data Sheet**  
**For Coatings and Related Materials**  
**Prep: May 1989 Update: Apr. 1999**

Sections I-IV (This Page) / [Sections V-X \(Click Here\)](#)

Section I - Product Identification

**Product Number:** X-6697

**Product Name:** Aquathane Clear Semi-Gloss Waterborne Finish

**Product Class:** Waterborne Lacquer

**24 Hour Emergency Assistance**

Emergency (Chemtrec) (800) 424-9300

Information (Farwest) (206) 244-8844

| Hazard Rating |         | This Product           |
|---------------|---------|------------------------|
| 0             | Lowest  | Health: 2              |
| 1             |         | Flammability: 1        |
| 2             |         | Reactivity: 0          |
| 3             |         | Personal Protection: B |
| 4             | Extreme |                        |

Section II - Hazardous Ingredients

| Ingredient             | CAS Number | Percent (By Weight) | Occupational Exposure |            |
|------------------------|------------|---------------------|-----------------------|------------|
|                        |            |                     | TLV (ACGIH)           | PEL (OSHA) |
| 1-Methyl-2-Pyrrolidone | 872-50-4   | 3.6%                | 100ppm                | 100ppm     |
| N-Methyl Pyrrolidone   |            |                     |                       |            |
| Ammonia                | 1336-21-6  | 0.5%                | 25ppm                 | 25ppm      |
| Ethylene Glycol        | 111-76-2   | 8.4%                | 25ppm                 | 25ppm      |
| Monobutyl Ether        |            |                     |                       |            |
| N,N-Diethylethanamine  | 121-44-8   | 0.85%               | 10ppm                 | 25ppm      |
| Triethylamine          |            |                     |                       |            |

"Pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372, this product contains or may contain a toxic chemical in a quantity subject to the reporting requirements under Section 313"

Section III - Physical Data

**Boiling Range:** 192-396 F.

**Weight/Gallon:** 8.50 lbs.

**Vapor Pressure:** 8.5mmHg@20C

**Vapor Density:**

**Heavier than Air:** XX

**Lighter than Air:**

**Evaporation Rate:**

**Faster than Ether:**

**Slower than Ether:** XX

**Percent Volatile by Volume:** 73%

**Solubility in Water:** Infinite

**VOC:** 186 Grams/Liter (Less Water)    **pH:** 8-9

**Reactivity in Water:** NIL

**Appearance:** Clear viscous liquid with an alcoholic, ammonia odor.

Section IV - Fire and Explosion Hazard Data

**Flammability Classification:**

**OSHA:** Non Flammable

**Flash Point:** N/A

**Class:** Not Restricted

**LEL:** N/A    **UEL:** N/A

**DOT:** Non Flammable

**UN Number:** 1263

**Extinguishing Media:** Foam, CO2, Dry Chemical, or Water Fog.

Use the above or any Class B extinguishing agent. Water may be unsuitable as an extinguishing medium, but helpful in keeping adjacent containers cool.

**Special Firefighting Procedures:** Firefighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus. Evacuate area of unprotected personnel. Wear protective clothing.

**Unusual Fire and Explosion Hazards:** Vapors may form an explosive mixture in air and may be ignited by sparks, pilot lights, etc. Closed containers may rupture when exposed to extreme heat.

**FUHR**  
International, LLC.  
Specialty Paint &  
Wood Coatings

High Quality Water based  
Wood Finishes

Product Series Number:  
**275**

## Multi-Purpose Ultra Clear Urethane

Summer 2002

A water based self-sealing, self- cross linking, modified urethane finish for use on various substrates requiring a very high quality finish. Substrates including tile, concrete, and various wood species. 275 was first designed for hardwood flooring applications, offering superior overall durability and buff ability. Its high quality performance has also proven to be a good choice for use on high end furniture, passage doors, millwork, windows and cabinetry when a true clear urethane is necessary. Typical dry time to touch in ambient conditions is 10 minutes, light handling in 15 minutes and sand able in 30 minutes. Use this product for both the sealer and finish application for best results. Sanding between coats with 320 grit (or higher) sandpaper is required for maximum quality and adhesion. 275 is compatible with most finish techniques & equipment.

### PRODUCT DATA & SPECIFICATIONS

|                               |                         |                            |                             |
|-------------------------------|-------------------------|----------------------------|-----------------------------|
| <b>Appearance &amp; Odor:</b> | Clear liquid, mild odor | <b>VOC content by #:</b>   | 1.00 #/gallon               |
| <b>Evaporation Rate:</b>      | Slower than ether       | <b>VOC content by G/l:</b> | 120 Grams / liter           |
| <b>Solubility in Water:</b>   | Soluble                 | <b>VHAP content:</b>       | 1.00 #/gallon               |
| <b>Specific Gravity:</b>      | < 1.04                  | <b># VOC/gal solids:</b>   | 3.32                        |
| <b>Weight per Gallon:</b>     | 8.68 #                  | <b>Flash Point:</b>        | Non-combustible             |
| <b>Solids by Weight:</b>      | 33 %                    | <b>Flammability:</b>       | Not applicable              |
| <b>Solids by Volume:</b>      | 30 %                    | <b>Viscosity:</b>          | # 4 Zahn Cup, 15-18 seconds |

**Substrate Preparation:** As a Sealer: surface should be pre-sanded with 220 grit abrasive and cleaned of any dust, dirt, etc. As a Finish: surface should be sealed and sanded with 320 grit or higher abrasive and cleaned of any remaining dust.

**Application:** Apply in wet coats measured at approximately 2-5 wet mils.

**Cleanup:** Flush all equipment with water both before and after use of 275. Build-up may be removed with a cleaner solution such as 330 Universal Cleaner & Stripper. Flushing with water is necessary after the use of any cleaning agent to avoid contamination.

### Featured Benefits

- \* Fast Dry \* Low VOC \* Superior Durability \* Brush able & Wipe able \* Buff able \*
- \* High Solids \* Water Clean-Up \* Self-Sealing \* Easy Application \* Meets KCMA \*

**1-800-558-7437**

Fuhr International, LLC  
P.O. Box 86  
Wilmington, MO 63366

[www.fuhrinternational.com](http://www.fuhrinternational.com)

**MATERIAL SAFETY DATA SHEET****Multi-Purpose Ultra Clear Urethane  
Series # 275****Section I. Manufactured By****Fuhr International**

64664 Woodburn Drive, Winigan, MO 63566

Emergency Telephone: 800-558-7437

Information Telephone: 660-857-4301

Preparation Date: 05-01-2003

| Section II. Hazardous Ingredients | PEL     | TLV     |
|-----------------------------------|---------|---------|
| N-Methyl-2-Pyrrolidinone;         |         |         |
| CAS #: 872-50-4                   | 100 ppm | 100 ppm |
| Triethylamine                     |         |         |
| CAS #: 108-01-0                   | 10 ppm  | 10 ppm  |
| Urethane Polymer                  |         |         |
| CAS #: Proprietary                | NE      | NE      |
| Ethylene Glycol Butyl Ether       |         |         |
| CAS #: 111-76-2                   | NE      | NE      |
| Diethylene Glycol Butyl Ether     |         |         |
| CAS #: 112-34-5                   | NE      | NE      |

**Section III. Physical Data**

|                                                  |                                       |
|--------------------------------------------------|---------------------------------------|
| Boiling Point:                                   | 212 F                                 |
| Specific Gravity (H <sub>2</sub> O=1):           | 1.04                                  |
| Vapor Pressure (mm Hg.):                         | Approx 23 mbar @ 20 C                 |
| Melting Point:                                   | Variable                              |
| Vapor Density (Air=1):                           | Greater than 1                        |
| Evaporation Rate (Butyl Acetate=1):              | Slower than ether                     |
| Solubility in Water:                             | Dilutable                             |
| Appearance and Odor:                             | Milky white liquid. Mild odor. ph 7-9 |
| VOC Content: (Method ASTM D3960-02-section 10.4) |                                       |
| TOTAL 1.36 # per gallon =                        | 163 grams/lit                         |
| VHAP Content: 1.00 # per gallon =                | 120 grams/lit                         |
| Weight per gallon:                               | 8.68 # / gallon                       |
| Solids by Volume:                                | 30 %                                  |
| Solids by Weight:                                | 33 %                                  |
| Viscosity:                                       | 15 - 18 seconds # 4 Zahn Cup          |
| #VOC/ Gallon Solids                              | 3.32                                  |

**Section IV. Fire and Explosion Hazard Data****Flash Point** (method used): Noncombustible.**Flammable Limits:** Not applicable**LEL:** NA **UEL:** NA**Extinguishing Media:** Carbon dioxide, dry chemical, water fog**Special Fire Fighting Procedures:****Unusual Fire and Explosion Hazard:** Water may be used to cool closed containers, to prevent pressure build up.

Material will not support combustion unless the water has evaporated.

**Section V. Reactivity Data**

|                                              |                  |
|----------------------------------------------|------------------|
| <b>Stability:</b>                            | Stable           |
| <b>Conditions to avoid:</b>                  | None Known       |
| <b>Incompatibility:</b> (Materials to avoid) | Strong Oxidizers |

**Hazardous Decomposition or By-products:** NA**Hazardous Polymerization:** Will not occur.  
**Conditions to Avoid:** None known**Section VI. Health Hazard Data**

| Route(s) of Entry<br>(see Health Haz.)                                                                                                                         | Inhalation?<br>Section VIII | Skin?<br>See Emergency/First Aid | Ingestion? |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------|------------|
| <b>Health Hazards:</b> Vapors and mist can irritate nose, throat and lungs. Slight irritation to skin. Contact of product to eyes may cause slight irritation. |                             |                                  |            |

| Carcinogenicity | NPT? | IARC? | OSHA? |
|-----------------|------|-------|-------|
| NONE            | NE   | NE    | NE    |

**Signs and symptoms of exposure:** Note: Health hazards.**Medical Conditions :**

Substantially irritating to eyes. Slightly irritating to Skin.

**Emergency and First Aid Procedures:**

If swallowed drink 2 glasses of water. See a Physician. For eye or skin contact, flush eyes with water for 15 minutes. Wash skin with soap and water.

**Section VII. Precautions for Safe Handling and Use.**

(Steps to be taken if released or spilled): Ventilate area.

Remove sources of spill. Remove with inert absorbent.

NOTE: This product is not a hazardous waste under RCRA regulations.

**Waste Disposal Method:** Dispose material as Non-hazardous paint product according to local regulations.**Handling and Storage Precautions:** Storage temperatures: Max: 49C/120F. Min: 1C/34F. Keep product from freezing.**Section VIII. Control Measures Respiratory Protection:**

Wear suitable respirator (MSHA/NIOSH-approved or equivalent) where exposure limits are exceeded.

**Ventilation:** At point of contaminant release.**Protective Gloves:** Impervious.**Eye Protection:** ANSI Z-87.1 or approved equivalent chemical splash goggles.**Other Protective Clothing or Equipment:** Eye wash facility. Safety shower.**Work/Hygienic Practices:** Wash thoroughly after handling.

**FUHR**  
International, LLC  
Specialty Paint &  
Wood Coatings

High Quality Water based  
Wood Finishes

**BEST GRADE**

Product Number:  
**355**

## Waterborne Acrylic Varnish

Summer 2002

A water based self-sealing, self-cross linking acrylic finish for use on interior wood substrates requiring a high quality sealer and topcoat. This product is designed for the kitchen cabinet industry and exceeds KCMA finish coat testing requirements with proper application. The excellent water, chemical and scratch resistance along with self-sealing technology make this a great finish choice for many applications outside the cabinet industry, including but not limited to furniture, molding, passage doors, millwork and wine racks. 355 offers excellent wetting of the wood providing for the ever desired "solvent look" while remaining non-hazardous and low voc. Typical dry time to touch in ambient conditions is 5 minutes, light handling in 10 minutes and sand able in 20 minutes. Use this product for both the sealer and finish application for best results. Sanding between coats with 320 grit (or higher) sandpaper is recommended for maximum quality and is required after 4 hours ambient dry. Compatible with most finish equipment.

### PRODUCT DATA & SPECIFICATIONS

|                               |                         |                              |                            |
|-------------------------------|-------------------------|------------------------------|----------------------------|
| <b>Appearance &amp; Odor:</b> | Amber liquid, mild odor | <b>VOC content by #:</b>     | .61#/gallon                |
| <b>Evaporation Rate:</b>      | Slower than ether       | <b>VOC content by G/l:</b>   | 73 Grams / liter           |
| <b>Solubility in Water:</b>   | Soluble                 | <b>VHAP content:</b>         | 0                          |
| <b>Specific Gravity:</b>      | < 1.01                  | <b>VOC % Solids content:</b> | .003# /solids/gallon       |
| <b>Weight per Gallon:</b>     | 8.42 #                  | <b>Flash Point:</b>          | Non-combustible            |
| <b>Solids by Weight:</b>      | 2.50 #                  | <b>Flammability:</b>         | Not applicable             |
| <b>Solids by Volume:</b>      | 30 %                    | <b>Viscosity:</b>            | # 2 Zahn Cup, 45-50seconds |

**Substrate Preparation:** As a Sealer: surface should be pre-sanded with 220 grit abrasive and cleaned of any dust, dirt, etc. As a Finish: surface should be sealed and sanded with 320 grit or higher abrasive and cleaned of any remaining dust.

**Application:** Apply in wet coats measured at approximately 3-5 wet mils .

**Cleanup:** Flush all equipment with water both before and after use of 355. Build-up may be removed with a cleaner solution such as 330 Universal Cleaner & Stripper. Flushing with water is necessary after the use of any cleaning agent to avoid contamination

### Featured Benefits

- \* Fast Dry \* 73 g/l VOC \* Excellent Durability \* Anti-Sagging Formulation \*
- High Solids \* Water Clean-Up \* No Haps \* Self-Sealing \* Easy Application \* Meets KCMA \*
- May be used as a Class B clear coating for wood applications

**1-800-558-7437**

Fuhr International, LLC  
64664 Woodburn Drive  
Winigan, MO 63566

**www.fuhrinternational.com**

Available through



# WOODPRIDE™

## Interior Waterborne Aquacrylic Gloss Varnish

1808-0000



 Products of ICI  
Paints World Group

 FINISHES  
PAINTING 1099001

 FINISHES  
PAINTING 1099001

 Products of ICI  
Paints World Group



### Product Description

Our next generation waterborne clear gloss finish. WoodPride Aquacrylic Gloss Varnish provides durable, transparent protection for interior wood surfaces such as cabinets, doors, woodwork, paneling, furniture and floors. This finish is based on an advanced technology acrylic binder which forms a more durable, moisture and chemical resistant film than conventional water based clear finishes. This finish is also fast drying allowing multiple coat applications in a single day. May be used as a waterborne clear alternative to polyurethane finishes. Ideal for use over light woods (ash, maple, etc.), light colored stains or surfaces painted with latex or non-white oil base or alkyd enamels (i.e. faux finishes). Resistant to abrasion, chipping, marring, water, oil, alcohol and blushing.

### Features

- Provides durable, transparent protection
- Quick drying and recoat
- Resists abrasion, chipping and marring
- Resists water, oil, alcohol and blushing
- Low odor
- Low VOC

### Composition

- Waterborne Acrylic Polyurethane Resin
- Not manufactured with lead or mercury containing materials.

### Specifications

#### Color:

Clear

#### Finish:

Gloss, 70 units minimum @ 60°

#### Clean-up Solvent:

Soap and Water

#### Density:

8.5 lbs/gal (1.02 kg/L)

#### VOC:

1.59 lbs/gal (191 g/L)

#### Solids:

Volume - 27% ± 1%

Weight - 31% ± 1%

#### Practical Coverage:

Apply at 400-500 sq ft/gal (10-12 m<sup>2</sup>/L)  
depending on surface texture and porosity.

#### Flame Spread Rating:

Class A (0-25) over non-combustible  
surfaces

#### Flash Point:

205°F (96°C)

#### Dry Time 77°F (25°C) & 50% RH:

To touch - 1 hour

To recoat - 3-4 hours

#### Shelf Life:

1 year minimum - unopened

### General Surface Preparation

All surfaces must be uniformly sanded, sound, dry, clean and free of oil, grease, dirt, mildew, wax, flaking paint or varnish and other foreign substances. The final sanding step should be with 150-grit or finer paper (DO NOT USE STEEL WOOL). Dust or vacuum clean.

**NEW WOOD:** Sand smooth (DO NOT USE STEEL WOOL) and remove all dust. Stain with solventborne stain 1700 if desired. Seal with this product. Finish with one or two coats of this product as needed depending on appearance desired or severity of usage.

**WOOD FLOORS:** Sand smooth (DO NOT USE STEEL WOOL) and remove all dust. Stain with

1700 if desired. Seal with this product only. Finish with two additional coats of this product. For heavy traffic areas, commercial floor areas or hard usage areas such as stairs use solventborne polyurethane varnish 1902 or 1908.

#### PREVIOUSLY PAINTED OR VARNISHED

**SURFACES:** Remove all wax, grease and oil by washing with mineral spirits. Sand lightly (DO NOT USE STEEL WOOL). Dust clean. May be applied as a clear finish over aged varnishes, non-flat latex paints or non-white oil base or alkyd enamels. Flat latex paints must be sealed with a latex enamel prior to applying this product.

Surfaces in poor condition should be sanded or stripped to bare wood and finished as under **NEW**

solventborne stain

WOOD.

**Directions For Use****TINTING:** Do not tint.

**SPREADING RATE:** Apply at 400-500 sq ft/gal (10-12 m<sup>2</sup>/L) on smooth sealed surfaces. Actual coverage may vary depending on substrate and application method.

**APPLICATION:** May be applied by synthetic brush, foam applicator, short nap roller or spray. No thinning required. Stir well, but do not shake. Apply thin uniform coats. Do not overbuild. Sand lightly (DO NOT USE STEEL WOOL) and clean thoroughly between coats. For spray application, use low pressure and a .013" tip. Do not apply when surface or air temperature is below 50°F (10°C). Provide good ventilation and warmth for normal drying.

**NOTE:** Surfaces coated with this product may become

slippery when wet. Although incorporation of additives within the product may affect clarity of the dried film, for additional slip resistance in areas of pedestrian traffic add one pound per gallon of coarse pumice or other texturing material.

**DRYING TIME:** At 77°F (25°C) & 50% R.H., dries to touch in one hour and to recoat in three to four hours. Low temperature, high humidity thick films or poor ventilation will increase these times. The hardening or curing process takes approximately seven days. The floor may be walked on after 24 hours, but the floor is more susceptible to scuffing or marring during this period.

**CLEAN-UP:** Clean immediately with warm, soapy water.

**Precautions**

**WARNING! CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED. OVEREXPOSURE MAY CAUSE LIVER, KIDNEY, REPRODUCTIVE DAMAGE. USE ONLY WITH ADEQUATE VENTILATION. KEEP OUT OF THE REACH OF CHILDREN. NOTICE:** Products in this series contain solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. For emergency information call (800) 545-2643. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using. Close container after each use. **FIRST AID:** In case of skin contact, wash off **quickly** with plenty of soap and water, remove contaminated clothing. For eye contact flush **immediately** with large amounts of water, for at least 15 minutes. **Obtain emergency medical treatment.** If swallowed, obtain medical treatment **immediately.** If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, **get medical help.** **KEEP FROM FREEZING. Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information.**

DS72-1296

**Shipping****FREIGHT CLASSIFICATION:**

Paint, Freezable

**PACKAGING:**

1 quart (0.946 L)

1 gallon (3.785 L)

**FLASH POINT:**

205°F (96°C)

**LIMITATION OF LIABILITY** To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained herein. **WE MAKE NO OTHER WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED,**



From the Makers of Dulux, Sinclair, Glidden &amp; Devco Coatings



# MATERIAL SAFETY DATA SHEET

prepared 10/03/01

## HAZARDS IDENTIFICATION

(ANSI Section 3)

**Primary route(s) of exposure :** Inhalation, skin contact, eye contact, ingestion.

**Effects of overexposure :**

**Inhalation :** Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, dizziness and/or lightheadedness, headache, nausea, central nervous system depression, confusion, blood abnormalities, loss of consciousness.

**Skin contact :** Irritation of skin. Prolonged or repeated contact can cause dermatitis.

**Eye contact :** Irritation of eyes. Prolonged or repeated contact can cause tearing of eyes, redness of eyes.

**Ingestion :** Ingestion may cause mouth and throat irritation, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, diarrhea, gastro-intestinal disturbances, central nervous system depression, intoxication, liver damage, kidney damage, reproductive system damage.

**Medical conditions aggravated by exposure :** Eye, skin, respiratory disorders

## FIRST-AID MEASURES

(ANSI Section 4)

**Inhalation :** Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Get medical attention if discomfort or irritation persists.

**Skin contact :** Flush from skin with water. Then wash thoroughly with soap and water. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

**Eye contact :** Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

**Ingestion :** If swallowed, obtain medical treatment immediately.

## FIRE-FIGHTING MEASURES

(ANSI Section 5)

**Fire extinguishing media :** Dry chemical or foam water fog. Carbon dioxide. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Closed containers may burst if exposed to extreme heat or fire. In closed tanks, water or foam may cause frothing or eruption.

**Fire fighting procedures :** Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

**Hazardous decomposition or combustion products :** Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases.

## ACCIDENTAL RELEASE MEASURES

(ANSI Section 6)

**Steps to be taken in case material is released or spilled :** Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Spills may be collected with absorbent materials. Evacuate all unnecessary personnel. Place collected material in proper container. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

## HANDLING AND STORAGE

(ANSI Section 7)

**Handling and storage :** Store below 100°F (38°C). Keep away from heat, sparks and open flame. Keep from freezing.

**Other precautions :** Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after

handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Empty containers may contain hazardous residues. Ground equipment when transferring to prevent accumulation of static charge.

## EXPOSURE CONTROLS/PERSONAL PROTECTION

(ANSI Section 8)

**Respiratory protection :** Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

**Ventilation :** Provide dilution ventilation or local exhaust to prevent build-up of vapors.

**Personal protective equipment :** Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing, face shield, apron, boots.

## STABILITY AND REACTIVITY

(ANSI Section 10)

**Under normal conditions :** Stable see section 5 fire fighting measures

**Materials to avoid :** Oxidizers, acids, reducing agents, bases. Alkalis caustics, mineral acids.

**Conditions to avoid :** Elevated temperatures, contact with oxidizing agent, storage near acids, freezing, sparks, open flame, extremes in temperature.

**Hazardous polymerization :** Will not occur

## TOXICOLOGICAL INFORMATION

(ANSI Section 11)

**Supplemental health information :** Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, reproductive system.

**Carcinogenicity :** No carcinogenic effects are anticipated

**Reproductive effects :** No reproductive effects are anticipated

**Mutagenicity :** No mutagenic effects are anticipated

**Teratogenicity :** Prolonged ingestion of diethylene glycol monomethyl ether has resulted in fetal development abnormalities in rats and effects on fertility in mice.

## ECOLOGICAL INFORMATION

(ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

## DISPOSAL CONSIDERATIONS

(ANSI Section 13)

**Waste disposal :** Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

## REGULATORY INFORMATION

(ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

The information contained herein is based on data available at the time of preparation of this data sheet which ICI Paints believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. ICI Paints shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and the users of this material. Complies with OSHA hazard communication standard 29CFR1910.1200.



## Physical Data

(ANSI Sections 1, 9, and 14)

| Product Code | Description                                                           | Wt. / Gal. | VOC gr. / ltr. | % Volatile by Volume | Flash Point | Boiling Range | HMS  | DOT, proper shipping name         |
|--------------|-----------------------------------------------------------------------|------------|----------------|----------------------|-------------|---------------|------|-----------------------------------|
| 1808-0000    | woodpride waterborne aquacrylic varnish gloss finish, interior, clear | 8.50       | 192.84         | 73.33                | above 200F  | 192-477       | *110 | paint ** protect from freezing ** |

## Ingredients

Product Codes with % by Weight (ANSI Section 2)

| Chemical Name                                                             | Common Name                        | CAS. No.   | 1808-0000 |
|---------------------------------------------------------------------------|------------------------------------|------------|-----------|
| ethanol, 2-(2-methoxyethoxy)-                                             | diethylene glycol monomethyl ether | 111-77-3   | 1-5       |
| propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol | texanol                            | 25265-77-4 | 1-5       |
| water                                                                     | water                              | 7732-18-5  | 60-70     |
| 2-pyrrolidinone, 1-methyl-                                                | n-methylpyrrolidone                | 872-50-4   | 1-5       |
| polyurethane resin                                                        | polyurethane resin                 | Sup. Conf. | 5-10      |
| acrylic resin                                                             | acrylic resin                      | Sup. Conf. | 20-30     |

## Chemical Hazard Data

(ANSI Sections 2, 8, 11, and 15)

| Common Name                        | CAS. No.   | ACGIH-TLV  |          |          | OSHA-PEL   |          |          | S.R.     |    |    | H M N I O |   |   |
|------------------------------------|------------|------------|----------|----------|------------|----------|----------|----------|----|----|-----------|---|---|
|                                    |            | 8-Hour TWA | STEL     | C        | 8-Hour TWA | STEL     | C        | Std.     | S2 | S3 | CC        | H | M |
| diethylene glycol monomethyl ether | 111-77-3   | not est.   | not est. | not est. | not est.   | not est. | not est. | not est. | n  | y  | n         | n | n |
| texanol                            | 25265-77-4 | not est.   | not est. | not est. | not est.   | not est. | not est. | not est. | n  | y  | n         | n | n |
| n-methylpyrrolidone                | 872-50-4   | not est.   | not est. | not est. | not est.   | not est. | not est. | not est. | n  | y  | n         | n | n |
| polyurethane resin                 | Sup. Conf. | not est.   | not est. | not est. | not est.   | not est. | not est. | not est. | n  | n  | n         | n | n |

**Footnotes:**  
 C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborne exposure, may result from skin absorption.

n/a=not applicable  
 not est=not established  
 CC=CERCLA Chemical

ppm=parts per million  
 mg/m3=milligrams per cubic meter  
 Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS  
 S3=Sara Section 313 Chemical  
 S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant  
 P=Pollutant, S=Severe Pollutant  
 Carcinogenicity Listed By:  
 N=NTP, I=IARC, O=OSHA, y=yes, n=no



# TECHNICAL DATA

## 9500™ MB ELASTOMERIC FR COATING FOR METAL BUILDINGS

### 1. PRODUCT NAME:

9500 MB Elastomeric Coating. An elastomeric coating for protecting metal against corrosive conditions and stopping roof leaks.

### 2. MANUFACTURER:

**GEOCEL CORPORATION**  
P.O. Box 398  
Elkhart, IN 46515  
Ph: (800) 348-7615  
Fx: (800) 348-7009

### 3. PRODUCT DESCRIPTION AND USE:

9500 MB is a blend of polymers and EPDM that, when cured forms a rubber membrane coating that protects metal against corrosive conditions. It was specifically designed to protect metal against corrosion and to prevent metal roofs from leaking. 9500 MB cures to a flexible, durable, non-tacky finish. The chemical make-up of 9500 MB allows for movement of a metal building roof without the tearing of this coating. 9500 MB resists weathering, ultraviolet deterioration and dirt pick up and will remain highly reflective for years. 9500MB is designed for use over metal roofing and siding in both commercial and industrial applications.

#### Physical Properties:

|                                    |                        |
|------------------------------------|------------------------|
| Solids by Weight                   | 62%                    |
| Solids by Volume                   | 60%                    |
| Weight per Gallon                  | 10.4 lbs.              |
| Viscosity                          | 100 KU                 |
| pH                                 | 9.0                    |
| Flash Point                        | None to Boiling        |
| Tensile Strength at max stress     | 400 psi                |
| Elongation at Break                | 500%                   |
| Hardness - Shore A (ASTM-D-2240)   | 90                     |
| Permeability (ASTM E-96-A, D-1653) | 2.2 perm               |
| Mildew Growth                      | None (2 yrs. exterior) |
| Service Temp Range                 | - 70° to 200° F        |

#### Fire Resistance Testing:

**UL-790 Class A Systems\*:** 9500 MB has UL-790 Class A classified systems over UL classified spray-applied urethane foams. Refer to UL Building Materials Directory or UL Classification Cards for foam manufacturers and types, foam thicknesses and densities, incline and coating requirements to qualify as a rated roof system. Refer to File #R 14098.

**UL Roof Deck Construction\*\*:** 9500 MB has UL Class A Classification over urethane foam sprayed directly to metal decks. Refer to UL Building Material Directory under Roof Deck Construction #136 for conditions to qualify as a rated roof system.

\*Cements and Coatings for built-up Roof Covering are classified by Underwriters Laboratories, Inc. for external fire exposure only. See UL Classified Building Material Index.

\*\*Roof Coatings Classified by Underwriters Laboratories, Inc. for internal fire exposure only for use in Construction No. 136. See UL Classified Building Materials Directory.

**Limitations:** 9500 MB should not be used on refrigerated tanks or in any other application where a vapor barrier is required.

**Packaging:** 9500 MB is packaged in 5 gallon pails and 55 gallon drums.

**Colors:** Standard colors are white and light gray. Special colors may be available upon request. Call Geocel Corporation at (800) 348-7615 for further technical assistance.

### 4. APPLICATION INSTRUCTIONS:

**Recommended Equipment:** 9500 MB is supplied in a sprayable consistency. However, it can be applied with brush or roller, if desired. Best results will be obtained with the use of proper airless spray equipment. Larger equipment will increase production capabilities. There is no limit to the maximum size of equipment with which 9500 MB may be sprayed. When finished, use water to thoroughly flush equipment. Purge the water from the system with cellosolve solvent. Leave solvent in the lines and equipment until next use. Close container tightly after each use.

**Mixing and Thinning:** Although it may appear homogeneous, each drum should be thoroughly mixed with explosion proof power mixing equipment prior to application. In hot weather, opened containers may form a surface skin in the drum. This must be removed before mixing or spraying.

9500 MB has a rich thixotropic consistency. Thinning is not recommended.

**Application Notes:** The overall coverage should be between 2 to 2.5 gallons per 100 sq. ft.

Based on the above specifications and specific written requests, Geocel Corporation will provide a 5 year no leak warranty for metal roofing.

1 gal/100 sq.ft. = 16 wet mils = 9.6 dry mils  
1.5 gal/100 sq. ft. = 24 wet mils = 14.4 dry mils

White and gray coats may be alternated if desired to assist the applicator to see that the second coat coverage is complete and continuous.

**Weather Precautions:** 9500 MB may be applied at any temperature over 45° F. At temperatures below 60° F., 9500 MB may become more difficult to spray. Maintaining product temperature at or above this temperature, by the use of drum heaters will facilitate spraying and speed cure times. Do not spray if temperature is expected to drop below 32° F. within 24 hours.

9500 MB will be resistant to rain and dew as soon as it thoroughly tacks off (after approximately 1-1/2 to 2 hrs. of sunlight at 75° F. & 75% R.H.) At cooler temperatures, high humidities, or overcast conditions, the tacking off process will require longer times. Do not apply second coat of 9500 MB until first coat is thoroughly dry. Do not apply at temperatures below 35° F. In cooler weather, drums should be stored in a warm place to facilitate ease of spraying.

NO DRUM MAY BE HEATED WITH DIRECT FLAME OR WITH ANY OTHER SOURCE OF OPEN HEAT. Use with adequate ventilation. Observe all standard safety practices. All explosion proof electrical equipment should be grounded in accordance with the National Electrical Code.

#### DO NOT ALLOW 9500 MB TO FREEZE.

**Disposal:** Dispose of container in accordance with local, state and federal regulations. Each person, firm, or corporation engaged in the application, installation, disposal or any other use of these materials shall carefully determine whether there is a potential hazard associated with such product in a specific usage, and utilize all appropriate precautionary and safety measures as outlined in local, state and Federal regulations governing the use or disposal of these products or the construction and/or renovation of structures.

#### 5. LIMITED WARRANTY:

Geocel Corporation warrants this product to be free of manufacturing defects due to workmanship and materials for the duration of five (5) years in accordance with the conditions stated in this product Technical Data sheet. The warranty is limited to the replacement of this product when such product proves to be defective in manufacture. This express warranty will only apply if the product is used for its specified purposes. It does not apply to failures due to improper application.

The company shall not be liable, in any event, for any incidental, consequential, special or indirect damages or damages to a structure or its contents from any cause whatsoever. This warranty may not be modified or amended by an employee, representative, agent or customer of Geocel Corporation. This warranty is exclusive and is in lieu of all other warranties, express or implied, including any implied warranty for merchantability or fitness for a particular purpose.

### 9500 SHORT FORM SPECIFICATIONS

#### 9500 OVER METAL ROOFING

- 1) Power wash roof with Trisodium Phosphate and water, rinse and allow to dry.
- 2) Stitch screw open seams where necessary. If seams do not close, tape with Seaming Tape.
- 3) Prime with **9912 PRIMER** at the rate of 1 gallon per 400 square feet. If rust exists, prime with **9920 PRIMER** at the rate of one gallon per 300 square feet.
- 4) Spray all seams and fastener heads with 40 to 50 mils of 9500 MB
- 5) Spray balance of roof with 1.5 to 2.0 gallons per 100 square feet of **9500 MB**

The information contained herein is, to the best of our knowledge, true and accurate, but no guarantee, written or implied, is given with respect to said information or recommendations. All Geocel Corporation products are manufactured in conformance with our quality assurance standards, but since conditions of use are beyond our control, Geocel disclaims any liability incurred in connection with the use of our products or the information contained herein. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents.

# Material Safety Data Sheet

May be used to comply with  
OSHA's Hazard Communication Standard  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

## U.S. Department of Labor

Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072



### IDENTITY

9500 MB

*Note: Blank spaces are not permitted. If any item is not applicable, or no  
information is available, the space must be marked to indicate that.*

### Section I

Manufacturer's Name

Geocel Corporation

Address (Number, Street, City, State, and ZIP Code)

P.O. Box 398

Elkhart, IN 46514

Emergency Telephone Number

(800) 255-3924

Telephone Number for Information

(219) 264-0645

Date Prepared

8-21-00 Supercedes 10/99

Signature of Preparer (optional)

Technical Staff

### Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits<br>Recommended | % (optional) |
|-------------------------------------------------------------------|----------|-----------|-----------------------------|--------------|
| Mineral Spirits (CAS# 8052-41-3)                                  | 100 PPM  |           |                             | 2%           |
| Aromatic Hydrocarbon (CAS# 64742-95-6)                            | 100 PPM  |           |                             | 1.5%         |

VOC Content minus water 35.57 g/l

HMIS Rating - Health 1 Flammability 0 Reactivity 0 Personal Protection B

### Section III - Physical/Chemical Characteristics

|                         |                     |                                         |                     |
|-------------------------|---------------------|-----------------------------------------|---------------------|
| Boiling Point           | 100 C/212 F (water) | Specific Gravity (H2O = 1)              | 1.4                 |
| Vapor Pressure (mm Hg)  | N/A                 | Melting Point                           | N/A                 |
| Vapor Density (AIR = 1) | less than 1 (water) | Evaporation rate<br>(Butyl Acetate = 1) | less than 1 (water) |

Solubility in Water  
dilutable

Appearance and Odor

creamy, viscous liquid/mild acrylic odor

### Section IV - Fire and Explosion Hazard Data

|                                 |                  |     |     |
|---------------------------------|------------------|-----|-----|
| Flash Point (Method Used)       | Flammable Limits | LEL | UEL |
| N/A                             |                  | N/A | N/A |
| Extinguishing Media             |                  |     |     |
| N/A                             |                  |     |     |
| Special Firefighting Procedures |                  |     |     |
| N/A                             |                  |     |     |

Unusual Fire and Explosion Hazards

N/A

**Section V - Reactivity Data**

|           |          |   |                                                                     |
|-----------|----------|---|---------------------------------------------------------------------|
| Stability | Unstable |   | Conditions to Avoid<br>onset of polymer decomposition is 177C/350 F |
|           | Stable   | X |                                                                     |

Incompatibility (Materials to Avoid)

none known

Hazardous Decomposition or Byproducts

none known

Hazardous  
Polymerization

May Occur

Conditions to Avoid  
N/A

Will Not Occur

X

**Section VI - Health Hazard Data**

|                    |             |       |            |
|--------------------|-------------|-------|------------|
| Route(s) of Entry: | Inhalation? | Skin? | Ingestion? |
|                    | X           | X     |            |

Health Hazards (Acute and Chronic)

Acute - mild eye, skin and pulmonary irritant

Chronic - none known

Carcinogenicity:

NTP?

IARC Monographs?

OSHA Regulated?

Signs and Symptoms of Exposure

headache, nausea, eye and skin irritation

Medical Conditions

Generally Aggravated by Exposure Pre-existing eye, skin and respiratory disorders.

Emergency and First Aid Procedure

**Eye contact:** Flush with large amounts of water. Get medical attention.**Skin contact:** Wash with soap and water. Launder contaminated clothing before reuse.**Inhalation:** Move individual to fresh air. Get medical attention.**Ingestion:** Seek medical attention.**Section VII - Precautions for Safe Handling and Use**

Steps to be Taken in Case Material is Released or Spilled

Absorb spill with inert material and transfer to containers for disposal.

Waste Disposal Method

Assure conformity with applicable governmental regulations.

Precautions to be Taken in Handling and Storage

Avoid storage at extremes of temperature.

Other Precautions

N/A

**Section VIII - Control Measures**

Respiratory Protection (Specify Type)

Not required with adequate ventilation

|             |                      |         |
|-------------|----------------------|---------|
| Ventilation | Local Exhaust        | Special |
|             | X                    | -       |
|             | Mechanical (General) | Other   |
|             | X                    | -       |

Protective Gloves

Recommended

Other Protective Clothing or Equipment

N/A

Work/Hygenic Practices

Wash hands before eating. No smoking.

# ROOF MATE

THE ROOF PRESERVATION SYSTEM  
Meets Federal Specification RRR-S-2838 & ASTM D6083

## Technical Data

### PRODUCT DESCRIPTION

ROOF MATE is a water-based, high solids elastomeric coating utilizing the latest advances in acrylic technology. Highest quality 100% acrylic resins are combined with reinforcing laminar pigments, an effective biocide package and non-migrating fire retardants, resulting in superior durability, weatherproofing, ultraviolet resistance, algae/mildew resistance and fire retardancy. ROOF MATE is a highly reflective, permanently flexible "breathing" membrane, allowing moisture vapor from the substrate or building interior to escape while remaining impervious to mass water penetration from the exterior. ROOF MATE is also available in a high-tensile strength version for roof areas subject to severe maintenance traffic, weather conditions, chemical fallout, etc.

### BASIC USES

ROOF MATE was especially developed for extending the life of metal, conventional built-up, modified bitumen, concrete, Hypalon, EPDM, sprayed-in-place or board-stock insulation, or composite shingle roofs. ROOF MATE forms a waterproof elastomeric seal, uniformly covering the textured profile of various substrates to form a monolithic membrane, providing protection from normal weathering, aging and ultraviolet exposure.

### COLORS

ROOF MATE is stocked in White, Light Gray or Medium Gray. An unlimited selection of custom colors are also available for specific applications. Color chips must be furnished to UNITED for all custom colors. ROOF MATE QS (Quick Set) is available for marginal conditions when a faster set time is desired with white or light colored topcoats.

### WARRANTY

ROOF MATE warranties are available in five (5), ten (10) or fifteen (15) year periods. The warranties guarantee the installation against leaks caused by normal weathering. Refer to individual warranty documents for additional information.

### TYPICAL PROPERTIES

1. **Solids by Weight:**  
60% ( $\pm 2$ ) [ASTM D2369]
2. **Solids by Volume:**  
54% ( $\pm 2$ ) [ASTM D5201]
3. **Weight per Gallon:**  
11.8 lbs. ( $\pm 2$ ) (1.41 kg/l) [ASTM D1475]
4. **Dry Time for Water Resistance:**  
2½ hours @ 70°F (21°C), 50% R.H.  
White @ 16 wet mils (406 microns)  
\*Required time will increase @ higher humidities
5. **Tensile Strength:**  
250 psi ( $\pm 20$ ) (1.80 MPa) @ 75°F (24°C)  
440 psi ( $\pm 20$ ) (3.17 MPa) @ 0°F (-18°C)  
[ASTM D412]
6. **Elongation:**  
300% ( $\pm 30$ ) @ 75°F (24°C)  
340% ( $\pm 30$ ) @ 0°F (-18°C)  
[ASTM D412]
7. **Hardness:**  
55-65 Shore A [ASTM D2240]
8. **Permeance:**  
3.0 U.S. perms (1.98 Metric Perm)  
@ 20 mils (508 microns) [ASTM E96]
9. **Ultraviolet Resistance:**  
No deleterious effects after 5,000 hours  
[ASTM D822, ASTM G23]
10. **Weather Resistance:**  
No deleterious effects after 5,000 hours  
[ASTM D822, ASTM G23]
11. **High Temperature Stability:**  
No age hardening up to 250°F (121°C)  
[ASTM D794]
12. **Resistance to Wind Driven Rain:**  
0.3% moisture result  
[Federal Specification TTC-555B]
13. **Bond Strength:**  
Exceeds cohesive strength of coating  
[ASTM C297]
14. **Temperature Limits for Service Conditions (Surface):**  
-30°F to 180°F (-35°C to 82°C)
15. **Code Approvals:**  
UL 790 Class A, Factory Mutual Class I and ICBO

## ADVANTAGES OF ROOF MATE

The Following Advantages Combine To Make **ROOF MATE** The Most Effective, Low-Cost Method Of Extending The Life Of New Or Existing Roof Surfaces.

### 1. Low Cost Application:

Fewer men can do the work that used to require many, at a fraction of the cost of other roofing systems. No bulky or expensive materials to haul, lift, spread, cut or glue. Simply apply **ROOF MATE** using a brush, roller or spray over the properly prepared roof substrate. Water cleanup further simplifies the job, which also conforms to all federal and state air pollution standards and VOC regulations.

### 2. Fast Application:

Roofs protected with **ROOF MATE** can be prepared and coated significantly faster than applying conventional built-up or single-ply systems.

### 3. High Solids and Resin Content:

The high volume solids of **ROOF MATE**, along with its high hide and vertical hold characteristics, allows for higher film build in fewer coats. This enables **ROOF MATE** to uniformly cover the uneven profile of textured substrates. The high ratio of 100% elastomeric acrylic polymer to filler pigment provides long-term weathering and ultraviolet resistance.

### 4. Lightweight:

A **ROOF MATE** roof is lighter than conventional and single-ply systems, putting less stress on the rest of the building. No glue, fasteners or heavy ballasting is required.

### 5. Permanent Flexibility:

**ROOF MATE** contains no migratory plasticizers, which may give good initial elasticity but leach out of the coating upon extended exterior exposure. **ROOF MATE** remains permanently flexible through the use of high grade, 100% elastomer acrylic polymers.

### 6. Colorfast:

The acrylic resins utilized in **ROOF MATE** crosslink under exterior exposure to lock in color and lock out dirt. The topcoat color remains true through years of weathering, while the tight, crosslinked surface repels dirt to remain clean.

### 7. Low Maintenance Costs:

With a **ROOF MATE** roof there is no asphalt to degrade, metal to corrode or seams to come apart. It is formulated to remain flexible to -30°F without cracking under stress, and is impervious to minor ponding water associated with most roofs. When maintenance is required, the repair is accomplished with the use of an acrylic caulk or touch-up with additional **ROOF MATE**.

### 8. Resists Abusive Weather:

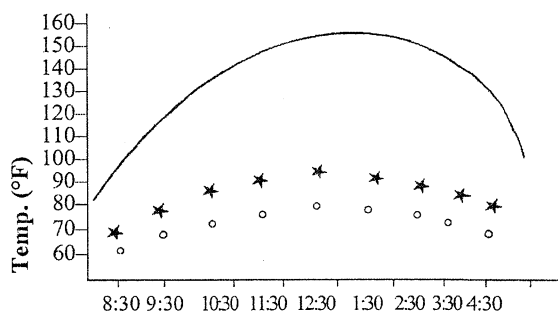
**ROOF MATE** will take abusive weather conditions of all types. Ice, snow, wind driven rain and sand do not penetrate its tough, dense surface under normal conditions.

### 9. Long Term Fire Protection:

**ROOF MATE** utilizes non-migratory fire retardants that become an integral and inseparable part of the coating to provide permanent fire retardancy.

### 10. Reduced Energy Cost:

**ROOF MATE** topcoat remains white to reflect the sun's heat, unlike dark-colored roofs that retain heat and are subject to ultraviolet degradation. Roof temperatures can be reduced in excess of 50°F.



— Black uncoated shingles

★ ★ ★ ★ White ROOF MATE coated shingles

○ ○ ○ ○ ○ Air temperature

### 11. Resistance To Foot Traffic:

**ROOF MATE'S** tough finish, together with its flexibility and bond strength characteristics, allow it to easily withstand the stresses of normal roof maintenance traffic.

### 12. Code Approvals:

**ROOF MATE** is UL classified as a Class "A" Fluid Applied Coating System, and as a Class A, B or C Maintenance & Repair System as outlined in the UL Roofing Materials & Systems Directory. It is Factory Mutual Approved for recover over FMRC-rated BUR or insulated metal panels. **ROOF MATE** is also ICBO evaluated and listed.

### 13. Warranty Programs:

**ROOF MATE** is backed by 5, 10 and 15 year, non-prorated warranty programs. These guarantee to the building owner that the coating system will not leak as result of degradation from normal weathering. All warranty programs are extendable to last for the life of the structure.



*Our products are guaranteed to meet established quality control standards. Information contained in our technical data is based on laboratory and field testing, but is subject to change without prior notice. No guarantees of accuracy are given or implied, nor does UNITED assume any responsibility for coverage, performance or injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement or, if applicable, to the terms stated within the executed project warranty.*

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

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PRODUCT NAME: ROOFMATE HIGH TENSILE (E-2885)  
PRODUCT CODE: SO 122

HMIS CODES: H F R P  
2 0 0 I

## ===== SECTION 1 - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: UNITED COATING MANUFACTURING CO  
ADDRESS : 19011 EAST CATALDO ROAD  
GREENACRES, WASHINGTON 99016-9423  
INITIAL(FIRST CALL)CHEMTREC(800)424-9300  
EMERGENCY PHONE : BACK-UP(800)541-4383  
DATE PRINTED : 7/7/03  
DATE REVISED : JULY 2000  
INFORMATION PHONE : (509) 926-7143

## ===== SECTION 2 - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

| REPORTABLE COMPONENTS                                                                                                                                                                                                                                                                                                                                                            | CAS NUMBER | MM HG @ TEMP | WEIGHT PERCENT |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|----------------|
| ACRYLIC POLYMER                                                                                                                                                                                                                                                                                                                                                                  | MIXTURE    | 17 68F-20C   | 56             |
| AQUA AMMONIA CAS#1336-21-6, .1%MAX. OSHA STEL 35PPM AS AMMONIA, ACGIH TWA 2 5PPM AS AMMONIA, STEL 35PPM AS AMMONIA. NO OTHER EXPOSURE LIMITS HAVE BEEN ESTABLISHED.                                                                                                                                                                                                              |            |              |                |
| CALCIUM CARBONATE                                                                                                                                                                                                                                                                                                                                                                | 471-34-1   | N/A N/A      | 21             |
| OSHA PEL-15MG/M3, TOTAL DUST, 5MG/M3, RESPIRABLE DUST.<br>ACGIH TLV-10 MG/M3, TOTAL DUST CONTAINING NO ASBESTOS AND <1% FREE SILICA.<br>IF SILICA LEVELS ABOVE 1.0% ARE PRESENT, THE TLV VALUE IS 0.1 MG OF RESPIRABLE SILICA PER CU. METER FOR BOTH OSHA PEL AND ACGIH TLV.                                                                                                     |            |              |                |
| CALCIUM CARBONATE                                                                                                                                                                                                                                                                                                                                                                | 1317-65-3  | N/A N/A      | 11             |
| OSHA PEL - 15 MG/M3 TOTAL DUST, 5 MG/M3 RESPIRABLE DUST.<br>ACGIH TLV - 10 MG/M3 TOTAL DUST CONTAINING NO ASBESTOS & <1.0% FREE SILICA.<br>IF SILICA LEVELS ABOVE 1.0% ARE PRESENT, THE TLV VALUE IS 0.1 MG OF RESPIRABLE SILICA PER CU. METER FOR BOTH OSHA PEL AND ACGIH TLV.                                                                                                  |            |              |                |
| WATER                                                                                                                                                                                                                                                                                                                                                                            | 7732-18-5  | UNK UNK      | 6              |
| NO OEL'S ESTABLISHED.                                                                                                                                                                                                                                                                                                                                                            |            |              |                |
| TITANIUM DIOXIDE                                                                                                                                                                                                                                                                                                                                                                 | 13463-67-7 | N/A N/A      | 4              |
| TITANIUM DIOXIDE, 86-97%, CAS#13463-67-7, ACGIH TLV-10MG/M3, TOTAL DUST TWA, OSHA PEL-15MG/M3, TOTAL DUST, 8 HR TWA, AEL(ACCEPTABLE EXPOSURE LIMIT) OF 10MG/M3, TOTAL DUST 8 HR TWA, 5MG/M3 RESPIRABLE DUST 8 HR TWA. (AEL IS THE EXPOSURE LIMIT RECOMMENDED BY THE MANUFACTURER OF THIS CHEMICAL).<br>ALUMINUM HYDROXIDE, CAS#21645-51-2, 1-5%, NO EXPOSURE LIMITS ESTABLISHED. |            |              |                |

\*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. \*\*\*

THIS MSDS MAY BE USED FOR OTHER COLORS AND CONTAINER SIZES OF THIS PRODUCT. WHEN PARTS A AND B ARE COMBINED, THE HAZARD WARNINGS FOR BOTH COMPONENTS ARE PRESENT.

## =====SECTION 3 HAZARDS IDENTIFICATAION=====

### POTENTIAL HEALTH EFFECTS

EYES:

SKIN:

### INGESTION:

MAY CAUSE ABDOMINAL PAIN, NAUSEA AND VOMITING.

### INHALATION:

VAPOR OR SPRAY MIST CAN CAUSE HEADACHE, NAUSEA AND IRRITATION OF THE NOSE, THROAT AND LUNGS.



## =====SECTION 4 FIRST AID MEASURES=====

EYES:

SKIN:

INGESTION:

INHALATION:

NOTE TO PHYSICIAN:

---

NONE FOR THIS MATERIAL

## =====SECTION 5 FIRE FIGHTING MEASURES=====

FLAMMABLE PROPERTIES:

FLASH POINT: >205F/>96C SETA FLASH CLOSED CUP.

LOWER FLAMMABLE LIMITS: N/A

UPPER FLAMMABLE LIMIT: N/A

AUTO IGNITION TEMPERATURE: NOT AVAILABLE

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG OR SPRAY, AS APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER ANY ENCLOSED OR CONFINED SPACE WITHOUT FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS (PRESSURE-DEMAND MSHA/NIOSH APPROVED OR EQUIVALENT) TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF COMBUSTION PRODUCTS AND OXYGEN DEFICIENCY.

## =====SECTION 6 ACCIDENTAL RELEASE MEASURES=====

SMALL SPILL:

DIKE AND ABSORB WITH INERT MATERIAL SUCH AS SAND AND REMOVE ALL LIQUID WITH THE USE OF A VACUUM SYSTEM. IF UNABLE TO REMOVE AS A LIQUID, THEN BEGIN TO ABSORB WITH SAND, SAW DUST OR COMMERCIAL ABSORBANT, AND SCOOP UP AND PLACE IN CONTAINERS FOR PROPER DISPOSAL. KEEP SPILLS AND CLEANING RUNOFF OUT OF THE MUNICIPAL SEWERS AND OPEN BODIES OF WATER. DECONTAMINATE ALL CLOTHING AND THE SPILL AREA WITH A DETERGENT AND LARGE AMOUNTS OF WATER.

LARGE SPILL:

USE SAME PROCEDURE AS SMALL SPILL.

## =====SECTION 7 HANDLING AND STORAGE=====

HANDLING & STORAGE:

KEEP FROM FREEZING. KEEP CONTAINER COOL AND DRY. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION. KEEP PRODUCT CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. AVOID SUBJECTING THIS PRODUCT TO EXTREME TEMPERATURE VARIATIONS.

OTHER PRECAUTIONS:

CLOSED CONTAINERS MAY EXPLODE DUE TO PRESSURE BUILD-UP IF EXPOSED TO EXTREME HEAT. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR OR SPRAY MIST. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS, ESPECIALLY DRUMS, SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF. USE ONLY IN A WELL VENTILATED AREA. KEEP OUT OF THE REACH OF CHILDREN.

## =====SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION=====

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**ENGINEERING CONTROLS/PERSONAL PROTECTION:**

USE LOCAL EXHAUST VENTILATION WITH A MINIMUM CAPTURE VELOCITY OF 100 FT/MIN. (.05 M.SEC.) AT THE POINT OF VAPOR EVOLUTION. REFER TO THE CURRENT EDITION OF INDUSTRIAL VENTILATION: A MANUAL OF RECOMMENDED PRACTICE PUBLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS FOR INFORMATION ON THE DESIGN, INSTALLATION, USE, AND MAINTENANCE OF EXHAUST SYSTEMS.

**RESPIRATORY PROTECTION:**

WEAR A NIOSH APPROVED RESPIRATOR APPROPRIATE FOR THE VAPOR OR MIST CONCENTRATION AT THE POINT OF USE. APPROPRIATE RESPIRATORS MAY BE A FULL FACEPIECE OR A HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED FOR ORGANIC VAPORS/MISTS, A SELF-CONTAINED BREATHING APPARATUS IN THE PRESSURE DEMAND MODE, OR A SUPPLIED-AIR RESPIRATOR. REFER TO OSHA STANDARD 29 CFR 1910.134 FOR ADDITIONAL INFORMATION.

**SKIN PROTECTION:**

THE USE OF GLOVES IMPERMEABLE TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT AND POSSIBLE IRRITATION. NOTE THAT PVA DEGRADES IN WATER.

**EYE PROTECTION:**

CHEMICAL GOGGLES. IF SPLASHING MAY OCCUR OR DURING SPRAY OPERATIONS WEAR A FACE SHIELD, UNLESS A FULL FACE PIECE RESPIRATOR IS USED. DO NOT WEAR CONTACT LENSES AS THEY MAY CONTRIBUTE TO THE SEVERITY OF INJURY TO THE EYE FROM CONTACT WITH LIQUID AND SPRAY MIST.

===== SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES=====

BOILING RANGE: 212F/100C - 2500-3000C      SPECIFIC GRAVITY (H2O=1): 1.3359

VAPOR DENSITY: LIGHTER THAN AIR

EVAPORATION RATE:

COATING V.O.C.: 0.13 lb/gl

COATING V.O.C.: 16 g/l

MATERIAL V.O.C.: 0.08 lb/gl

MATERIAL V.O.C.: 9 g/l

SOLUBILITY IN WATER: SOLUBLE.

APPEARANCE: HIGHLY THIXOTROPIC LIQUID.

ODOR: FAINT AMMONIACAL ODOR.

===== SECTION 10 STABILITY & REACTIVITY DATA=====

**STABILITY:**

STABLE

**CONDITIONS TO AVOID**

**INCOMPATIBILITY (MATERIALS TO AVOID)**

AVOID STRONG OXIDIZING AGENTS SUCH AS LIQUID CHLORINE, CONCENTRATED OXYGEN, SODIUM HYPOCHLORITE OR CALCIUM HYPOCHLORITE.

**HAZARDOUS DECOMPOSITION OR BY PRODUCTS:**

THERMAL DECOMPOSITION MAY YIELD ACRYLIC MONOMER, CARBON MONOXIDE AND CARBON DIOXIDE. UNIDENTIFIED ORGANIC COMPOUNDS IN FUMES AND SMOKE MAY BE FORMED DURING COMBUSTION.

**HAZARDOUS POLYMERIZATION: WILL NOT OCCUR**

===== SECTION 11 TOXICOLOGICAL INFORMATION=====

**EYE:**

INCONSEQUENTIAL IRRITATION

**SKIN:**

SKIN IRRITATION- RABBIT: PRACTICALLY NON-IRRITATING. DERMAL LD50-RABBIT: >5000 mg/kg.

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**INGESTION:**

INFORMATION IS BASED ON THE TOXICITY PROFILES FOR A NUMBER OF ACRYLIC EMULSIONS THAT ARE COMPOSITIONALLY SIMILAR TO THIS PRODUCT

TYPICAL DATA ARE:

PRACTICALLY NON-IRRITATING

**INHALATION:**

NO DATA

**SUBCHRONIC:**

HEADACHE, NAUSEA, ABDOMINAL PAIN AND IRRITATION OF THE NOSE, THROAT AND LUNGS. SKIN AND EYE IRRITATION.

**CHRONIC/CARCINOGENICITY:**

NO DATA

**TERATOLOGY:**

NO DATA

**REPRODUCTION:**

NO DATA.

**MUTAGENICITY:**

NO DATA.

=====SECTION 12 ECOLOGICAL INFORMATION=====

**ECOTOXICOLOGICAL INFORMATION:**

INHERENT BIODEGRADABILITY (OECD 302 B): THIS TYPE OF PRODUCT IS NOT BIODEGRADABLE BUT READILY BIOELIMINABLE.

EMULSION POLYMER BIODEGRADATION IS GENERALLY CONSIDERED LIMITED AND DEPENDENT ON POLYMER SIZE AND ORIGIN OF TREATMENT SLUDGE. HOWEVER, MOST OF THESE POLYMERS READILY ABSORB ONTO WATER TREATMENT SLUDGE AND THEREFORE WOULD BE BIOELIMINABLE FROM EFFLUENTS.

ACTIVATED SLUDGE RESPIRATORY INHIBITION (OECD 209): >100MG/L (NON-INHIBITING)

THE INFORMATION SHOWN IS BASED ON PROFILES OF COMPOSITIONALLY SIMILAR MATERIALS.

ALGAE (SELENASTRUM CAPRICORNUTUM), 72 HOUR EC50: >100 PPM (NON-TOXIC) RAINBOW TROUT (ONCORHYNCHUS MYKISS), 96 HOUR LC50: >100 PPM (NON-TOXIC) DAPHNIA MAGNA, 48 HOUR EC50: >100 PPM (NON-TOXIC) MICROTOX, 15 MINUTE EC50: >300 PPM (NON-TOXIC).

THE ABOVE DATA ARE FOR A COMPOSITIONALLY SIMILAR MATERIAL.

**CHEMICAL FATE INFORMATION:**

NO DATA.

SECTION 13 DISPOSAL CONSIDERATIONS:=====

**INSTRUCTIONS:**

DISPOSE OF UNUSED PRODUCT OR CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES. INCINERATION IS ACCEPTABLE AND THE PREFERRED METHOD OF DISPOSAL, HOWEVER; NITROGEN OXIDE EMISSIONS CONTROLS MAY BE REQUIRED TO MEET SPECIFICATIONS. CHEMICAL AND BIOLOGICAL DEGRADATION IS POSSIBLE. EMPTY CONTAINERS WILL RETAIN PRODUCT RESIDUE AND VAPORS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

## =====SECTION 14   TRANSPORT INFORMATION=====

## SHIPPING INFORMATION:

DOT INFORMATION - 49 CFR 172.101

DOT DESCRIPTION: NOT REGULATED

## =====SECTION 15 REGULATORY INFORMATION=====

(NOT MEANT TO BE ALL INCLUSIVE-SELECTED REGULATIONS REPRESENTED)

## US REGULATIONS:

## STATUS OF SUBSTANCES LISTS:

THE CONCENTRATIONS SHOWN IN SECTION II ARE MAXIMUM CEILING LEVELS (WEIGHT %)  
TO BE USED FOR CALCULATIONS FOR REGULATIONS.

FEDERAL EPA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY ACT  
OF 1980 (CERCLA) REQUIRES NOTIFICATION OF THE NATIONAL RESPONSE CENTER OF  
RELEASE OF QUANTITIES OF HAZARDOUS SUBSTANCES EQUAL TO OR GREATER THAN  
THE REPORTABLE QUANTITIES (RQ'S) IN 40 CFR 302.4.

COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III  
REQUIRES EMERGENCY PLANNING BASED ON THE THRESHOLD QUANTITIES (TPQ'S)  
AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQ'S) IN 40 CFR 355  
(USED FOR SARA 302, 304, 311, AND 312)

COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

REQUIRES SUBMISSION OF ANNUAL REPORTS OF RELEASE OF TOXIC CHEMICALS  
THAT APPEAR IN 40 CFR 372 (FOR SARA 313). THIS INFORMATION MUST BE INCLUDED  
IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

COMPONENTS THAT COULD REQUIRE REPORTING UNDER THE STATUTE: SEE SECTION II  
THE COMPONENTS OF THIS PRODUCT ARE LISTED OR EXCLUDED FROM LISTING ON THE

US TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.  
THE REMAINING PERCENTAGE OF UNSPECIFIED INGREDIENTS, IF ANY, ARE NOT CONTAINED  
IN ABOVE DE MINIMIS CONCENTRATIONS AND/OR ARE BELIEVED TO BE NON-HAZARDOUS  
UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), AND MAY  
CONSIST OF PIGMENTS, FILLERS, DEFOAMERS, WETTING AGENTS, RESINS, DRYERS,  
ANTI-BACTERIAL AGENTS, WATER AND/OR SOLVENTS IN VARYING CONCENTRATIONS.

## INTERNATIONAL REGULATIONS:

## CANADIAN WHMIS:

DOES NOT CLASSIFY AS HAZARDOUS.

## CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

NONE KNOWN

## EINECS:

NO INFORMATION.

## STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY  
THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986. THIS  
PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) KNOWN TO THE STATE OF CALIFORNIA

A: CAUSE CANCER:

B: CAUSE REPRODUCTIVE HARM:

## PENNSYLVANIA:

## NEW JERSEY:

## OTHER:

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=====SECTION 16   OTHER INFORMATION=====

THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND.  
USERS SHOULD CONSIDER THESE DATA ONLY AS A SUPPLEMENT TO OTHER INFORMATION  
GATHERED BY THEM & DETERMINE THE SUITABILITY & COMPLETENESS OF INFORMATION FROM  
ALL SOURCES TO ASSURE PROPER USE & DISPOSAL OF THESE MATERIALS & THE SAFETY &  
HEALTH OF EMPLOYEES & CUSTOMERS.

# ROOF MATE BASECOAT

HIGH SOLIDS 100% ACRYLIC ELASTOMER

## Technical Data & Application Instructions

### PRODUCT DESCRIPTION

ROOF MATE BASECOAT is a 60% volume solids, water-based acrylic elastomer coating utilizing the latest advances in acrylic technology. It combines 100% acrylic emulsion polymers with reinforcing laminar pigments, powerful biocides and non-migrating fire retardants for superior physical properties, adhesion, durability, weatherproofing, mildew resistance and fire retardancy. The fire retardant chemicals are permanently locked into the cured coating and will not leach out upon extended weathering. ROOF MATE BASECOAT is a "breathing" coating, allowing moisture vapor to pass through the film while remaining impervious to mass water penetration.

### BASIC USES

ROOF MATE BASECOAT was especially developed for use in embedding reinforcement fabric at detail areas and/or over the entire roof. It is also used for achieving film build prior to topcoating with ROOF MATE Finish Coat. It is formulated to achieve superior adhesion over metal, conventional built-up, modified bitumen, single ply, concrete and concrete tile, board-stock and sprayed-in-place polyurethane foam, and composite shingle roof substrates. ROOF MATE BASECOAT forms a water-proof elastomeric seal, uniformly covering the textured profile of these substrates.

### COLORS

ROOF MATE BASECOAT is available in standard medium gray color, which provides for a high visual contrast with the application of the subsequent ROOF MATE Finish Coat. The finish coat is available in White, Light Gray, Medium Gray and an unlimited selection of custom colors to meet specific project requirements. Color chips or samples must be furnished to UNITED for all custom colors.

### PACKAGING

ROOF MATE BASECOAT is a single-component material available in 5-gallon (19 liter) pails and 55-gallon (209 liter) drums.

### MIXING

Use a power mixer capable of uniformly mixing the entire container prior to use. ROOF MATE BASECOAT is easily pumped and sprayed at material temperatures of 60°F (16°C) or greater. Reducing the mixture is not recommended, as it affects the coatings ability to achieve a heavy film build with excellent vertical hold and hide.

### SURFACE PREPARATION

All surfaces must be clean and dry, and free of any dirt, dust, oil, surface chemicals or other contaminants that may interfere with optimum adhesion. All loose gravel, if present, shall be removed by power sweeping and/or vacuuming. Remaining gravel shall be power spud to achieve the smoothest surface possible. Any unsound areas in the roof, i.e. blisters, delamination, deterioration, moisture saturation, severe corrosion, sharp projections, ridges, etc. shall be repaired or replaced. New asphalt shall be exposed to ambient conditions for 45 to 60 days before coating.

Deteriorated or badly corroded metal shall be replaced. Rusted areas shall be mechanically abraded to remove all loose rust and then primed with UNITED'S Acrylex 300 or Alumiseal. New metal roofs exhibiting any type of surface film shall be washed with a vinegar or muriatic acid solution or equivalent to totally remove this film.

Low areas that hold excessive ponding water must be brought into conformance by installing additional drains or adding additional slope to existing drains.

Surfaces that are contaminated with oil, grease, embedded dirt, loose paint or coating, etc. shall be cleaned using United Cleaning Concentrate (UCC). High-pressure power washing may be necessary to remove tightly adhering contaminants. Power-rinse thoroughly with clean water to remove all traces of the UCC cleaner. If roof does not require chemical cleaning, thoroughly sweep, vacuum or blow down roof to remove any dirt, dust or other loose contaminants. Refer to separate Roof Mate Master Guide Specifications for complete surface preparation procedures on the specific substrate being coated.

## APPLICATION

Reinforce all "moving" cracks, seams, splits, control joints, vertical/horizontal interfaces, roof termination points, openings, transition areas, around the base of all vents pipes and other protrusions, as well as around HVAC units and other roof mounted equipment with **ROOF MATE Mesh**, a polyester reinforcement fabric, embedded into **ROOF MATE BASECOAT**.

Pre-measure the area to be reinforced and cut a strip of 4", 6" or 12" (10, 15 or 20 cm) **ROOF MATE Mesh** (depending upon the detail) to the desired length. Apply **ROOF MATE BASECOAT** liberally over the area to be detailed, at a minimum rate of 1.5 gallons per 100 sq. ft. (.6 l/m<sup>2</sup>), and embed the mesh so that it is centered over the detail area. Using a brush or roller, work the **ROOF MATE Mesh** into the **ROOF MATE BASECOAT** to eliminate air pockets, wrinkles and gaps. Apply additional **ROOF MATE BASECOAT** as necessary, at a minimum of 1 gallon per 100 sq. ft. (.4 l/m<sup>2</sup>), to ensure that the **ROOF MATE Mesh** is thoroughly saturated, encapsulated and fully adhered to the substrate.

When incorporating **ROOF MATE Fabric** for reinforcement of the entire roof, apply **ROOF MATE BASECOAT** at the rate of 1.5 gallons per 100 sq. ft. (.6 l/m<sup>2</sup>) to a 4' (1.2 m) wide section of roof where the fabric reinforcement will begin. Embed and encapsulate the end of the reinforcement fabric roll so that it is anchored at that point.

Roll or spray-apply **ROOF MATE BASECOAT** to a section of roof 4 to 10 feet (1.2 to 3 meters) beyond the fabric at the rate of approximately 1.5 gallons per 100 sq. ft. (.6 l/m<sup>2</sup>). Roll the reinforcement fabric over the wet **ROOF MATE BASECOAT**, allowing the fabric to conform to the surface contours. To ensure complete encapsulation of the fabric, it must be rolled into the **ROOF MATE BASECOAT** while it is still wet. Do not allow the **ROOF MATE BASECOAT** to surface skin prior to rolling out the fabric.

Work the **ROOF MATE BASECOAT** evenly throughout the **ROOF MATE Fabric** so that it is totally saturated, eliminating any air pockets, wrinkles or gaps. Apply an additional coat of **ROOF MATE Gray** over the top of the saturated **ROOF MATE Fabric** at the rate of approximately 1 gallon per 100 sq. ft. (.4 l/m<sup>2</sup>) so that it is totally encapsulated. Take extra care to ensure that edges of the fabric are well saturated and adhered. Overlap consecutive passes of **ROOF MATE Fabric** a minimum of 2" (5 cm) on each side.

Substrate porosity and texture will determine the amount of **ROOF MATE BASECOAT** required to encapsulate the reinforcing fabric. Allow the **ROOF MATE BASECOAT** to dry thoroughly prior to applying **ROOF MATE Finish Coat** to the roof.

## APPLICATION (Continued)

When using **ROOF MATE BASECOAT** to achieve film build prior to application of the **ROOF MATE Finish**, apply at the rate of 1 to 1½ gallons per 100 sq. ft. (.4 to .6 l/m<sup>2</sup>) per coat to achieve the desired film thickness.

**ROOF MATE BASECOAT** may be applied by airless spray equipment or roller. Brush or roller may be used for touch-up and edging work, or for small areas that are not practical for spray application. Airless spray is best suited for field application.

**ROOF MATE BASECOAT** can be used to obtain up to ½ of the total dry film thickness requirement specified. However, under no circumstances should the subsequent **ROOF MATE Finish** be less than 12 dry mils in thickness at any location.

## LIMITATIONS & PRECAUTIONS

**ROOF MATE BASECOAT** should generally not be used over cold storage tanks or buildings where a vapor barrier is required. **ROOF MATE BASECOAT** will freeze and become unusable at temperatures below 32°F (0°C), or when there is a possibility of temperatures falling below 32°F (0°C) within a 24-hour period after application.

**ROOF MATE BASECOAT** requires complete evaporation of water to cure. Cool temperatures and high humidity retard cure. **Do not apply if weather conditions will not permit complete cure before rain, dew, fog or freezing temperatures occur.** Do not apply in the late afternoon if heavy moisture condensation may appear during the night.

**ROOF MATE BASECOAT** may be applied to a wide range of clean, dry and structurally sound substrates. Slope for positive drainage is recommended for any roofing application. It is the responsibility of the applicator to ensure that the roof is sound and sloped properly, and that the expansion joints, vents and flashings have been installed as specified or required.

Avoid breathing of vapor or spray mist. For exterior applications, approved (MSHA/NIOSH) chemical cartridge respirator must be worn by applicator and personnel in vicinity of application. Check filters frequently to ensure proper protection. If used indoors, provide mechanical exhaust ventilation. During indoor spray operations, air line masks or positive pressure hose masks must be worn. Avoid contact with eyes and contact with skin.

For specific information on safety requirements. Refer to OSHA guidelines and **ROOF MATE BASECOAT** Material Safety Data Sheet.



LONGEVITY BY DESIGN  
19011 E. Cataldo Ave. • Greenacres, WA 99016  
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(800) 541-4383 • [www.unitedcoatings.com](http://www.unitedcoatings.com)



Our products are guaranteed to meet established quality control standards. Information contained in our technical data is based on laboratory and field testing, but is subject to change without prior notice. No guarantees of accuracy are given or implied, nor does UNITED assume any responsibility for coverage, performance or injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement or, if applicable, to the terms stated within the executed project warranty.

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HMIS CODES: H F R P

PRODUCT CODE: RM-BC-05

2 0 0 I

===== SECTION 1 - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: UNITED COATING MANUFACTURING CO

ADDRESS : 19011 EAST CATALDO ROAD

GREENACRES, WASHINGTON 99016-9423

INITIAL(FIRST CALL)CHEMTREC(800)424-9300

EMERGENCY PHONE : BACK-UP(800)541-4383DATE PRINTED : 7/3/03

DATE REVISED : SEPTEMBER 2002

INFORMATION PHONE : (509) 926-7143

===== SECTION 2 - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

| REPORTABLE COMPONENTS                                                       | CAS NUMBER | MM   | HG       | @ TEMP | WEIGHT PERCENT |
|-----------------------------------------------------------------------------|------------|------|----------|--------|----------------|
| CALCIUM CARBONATE                                                           | 471-34-1   | N/A  | N/A      |        | 45             |
| OSHA PEL-15MG/M3, TOTAL DUST, 5MG/M3, RESPIRABLE DUST.                      |            |      |          |        |                |
| ACGIH TLV-10 MG/M3, TOTAL DUST CONTAINING NO ASBESTOS AND <1% FREE SILICA.  |            |      |          |        |                |
| IF SILICA LEVELS ABOVE 1.0% ARE PRESENT, THE TLV VALUE IS 0.1 MG OF         |            |      |          |        |                |
| RESPIRABLE SILICA PER CU. METER FOR BOTH OSHA PEL AND ACGIH TLV.            |            |      |          |        |                |
| ACRYLIC POLYMER                                                             | MIXTURE    | 17   | 68       |        | 30             |
| AQUA AMMONIA, CAS#1336-21-6, .2%MAX, MANUFACTURER TWA 25PPM, STEL 35PPM AS  |            |      |          |        |                |
| AMMONIA. OSHA STEL 35PPM, ACGIH TWA 25PPM STEL 35PPM AS AMMONIA. NO OTHER   |            |      |          |        |                |
| NO OTHER EXPOSURE LIMITS HAVE BEEN ESTABLISHED.                             |            |      |          |        |                |
| WATER                                                                       | 7732-18-5  | UNK  | UNK      |        | 18             |
| NO OEL'S ESTABLISHED.                                                       |            |      |          |        |                |
| DI(HEPTYL, NONYL, UNDECYL) PHTHALATE                                        | 68515-42-4 | .300 | 356F180C |        | 2              |
| OSHA PEL: NOT EST., ACGIH TLV: NOT EST., STEL: NOT EST.                     |            |      |          |        |                |
| TITANIUM DIOXIDE                                                            | 13463-67-7 | N/A  | N/A      |        | 2              |
| TITANIUM DIOXIDE, 86-97%, CAS#13463-67-7, ACGIH TLV-10MG/M3, TOTAL DUST     |            |      |          |        |                |
| TWA, OSHA PEL-15MG/M3, TOTAL DUST, 8 HR TWA, AEL(ACCEPTABLE EXPOSURE LIMIT) |            |      |          |        |                |
| OF 10MG/M3, TOTAL DUST 8 HR TWA, 5MG/M3 RESPIRABLE DUST 8 HR TWA. (AEL IS   |            |      |          |        |                |
| THE EXPOSURE LIMIT RECOMMENDED BY THE MANUFACTURER OF THIS CHEMICAL).       |            |      |          |        |                |
| ALUMINUM HYDROXIDE, CAS#21645-51-2, 1-5%, NO EXPOSURE LIMITS ESTABLISHED.   |            |      |          |        |                |

\*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. \*\*\*

THIS MSDS MAY BE USED FOR OTHER COLORS AND CONTAINER SIZES OF THIS PRODUCT.

=====SECTION 3 HAZARDS IDENTIFICATAION=====

POTENTIAL HEALTH EFFECTS

EYES:

CONTACT WITH VAPOR AND/OR SPRAY MIST MAY RESULT IN IRRITATION, CONTACT WITH LIQUID MAY RESULT IN SEVERE IRRITATION

SKIN:

SUBSTANCE MAY CAUSE SLIGHT SKIN IRRITATION

INGESTION:

MAY CAUSE ABDOMINAL PAIN, NAUSEA AND VOMITING.

INHALATION:

VAPOR OR SPRAY MIST CAN CAUSE HEADACHE, NAUSEA AND IRRITATION OF THE NOSE, THROAT AND LUNGS.

=====SECTION 4 FIRST AID MEASURES=====

EYES:



M A T E R I A L   S A F E T Y   D A T A   S H E E T

ROOF MATE BASECOAT 5'S

Page: 2

IMMEDIATELY FLUSH WITH LOTS OF WATER FOR AT LEAST 15 MINUTES. IF REDNESS, ITCHING, OR A BURNING SENSATION DEVELOPS SEE A PHYSICIAN.

**SKIN:**

IMMEDIATELY WASH SKIN WITH LOTS OF SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES AND WASH BEFORE REUSE. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

**INGESTION:**

DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CONSULT A PHYSICIAN IMMEDIATELY

**INHALATION:**

REMOVE FROM SOURCE OF EXPOSURE AND INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

**NOTE TO PHYSICIAN:**

NONE FOR THIS MATERIAL

=====SECTION 5 FIRE FIGHTING MEASURES=====

**FLAMMABLE PROPERTIES:**

FLASH POINT: >205F/>96C SETA FLASH CLOSED CUP.

LOWER FLAMMABLE LIMITS: N/A

UPPER FLAMMABLE LIMIT: N/A

AUTO IGNITION TEMPERATURE: NOT AVAILABLE

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG OR SPRAY, AS APPROPRIATE FOR SURROUNDING FIRE.

**SPECIAL FIRE FIGHTING PROCEDURES:**

DO NOT ENTER ANY ENCLOSED OR CONFINED SPACE WITHOUT FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS (PRESSURE-DEMAND MSHA/NIOSH APPROVED OR EQUIVALENT) TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF COMBUSTION PRODUCTS AND OXYGEN DEFICIENCY.

=====SECTION 6 ACCIDENTAL RELEASE MEASURES=====

**SMALL SPILL:**

DIKE AND ABSORB WITH INERT MATERIAL SUCH AS SAND AND REMOVE ALL LIQUID WITH THE USE OF A VACUUM SYSTEM. IF UNABLE TO REMOVE AS A LIQUID, THEN BEGIN TO ABSORB WITH SAND, SAW DUST OR COMMERCIAL ABSORBANT, AND SCOOP UP AND PLACE IN CONTAINERS FOR PROPER DISPOSAL. KEEP SPILLS AND CLEANING RUNOFF OUT OF THE MUNICIPAL SEWERS AND OPEN BODIES OF WATER. DECONTAMINATE ALL CLOTHING AND THE SPILL AREA WITH A DETERGENT AND LARGE AMOUNTS OF WATER.

**LARGE SPILL:**

USE SAME PROCEDURE AS SMALL SPILL.

=====SECTION 7 HANDLING AND STORAGE=====

**HANDLING & STORAGE:**

KEEP FROM FREEZING. KEEP CONTAINER COOL AND DRY. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION. KEEP PRODUCT CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. AVOID SUBJECTING THIS PRODUCT TO EXTREME TEMPERATURE VARIATIONS.

**OTHER PRECAUTIONS:**

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

## =====SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION=====

## ENGINEERING CONTROLS/PERSONAL PROTECTION:

IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE DURING MIXING AND APPLICATION OPERATIONS TO MINIMIZE EXPOSURE, SPRAY OR ROLL WITH WIND OR FAN CARRYING VAPORS AWAY FROM YOU. TURN OFF HEATING AND/OR AIR CONDITIONING EQUIPMENT TO PREVENT CONTAMINATING BUILDING.

## RESPIRATORY PROTECTION:

FOLLOW OSHA REGULATION 29 CFR 1910.134 FOR RESPIRATOR USE. WHERE OVERSPRAY IS PRESENT, OR IF CONCENTRATION OF PRODUCT IS NOT KNOWN OR ARE ABOVE THE EXPOSURE GUIDELINES. WHEN COMFORT LEVELS MAY BE EXCEEDED, USE AN APPROVED AIR-PURIFYING RESPIRATOR EQUIPPED WITH AN AMMONIA/METHYLAMINE CARTRIDGE(S).

## SKIN PROTECTION:

THE USE OF GLOVES IMPERMEABLE TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT AND POSSIBLE IRRITATION. NOTE THAT PVA DEGRADES IN WATER.

## EYE PROTECTION:

CHEMICAL GOGGLES. IF SPLASHING MAY OCCUR OR DURING SPRAY OPERATIONS WEAR A FACE SHIELD, UNLESS A FULL FACE PIECE RESPIRATOR IS USED. DO NOT WEAR CONTACT LENSES AS THEY MAY CONTRIBUTE TO THE SEVERITY OF INJURY TO THE EYE FROM CONTACT WITH LIQUID AND SPRAY MIST.

## ===== SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES=====

|                                       |                                  |
|---------------------------------------|----------------------------------|
| BOILING RANGE: 212F/100C - 2500-3000C | SPECIFIC GRAVITY (H2O=1): 1.4595 |
| VAPOR DENSITY: LIGHTER THAN AIR       | EVAPORATION RATE:                |
| COATING V.O.C.: 0.09 lb/gal           | COATING V.O.C.: 10 g/l           |

|                              |                        |
|------------------------------|------------------------|
| MATERIAL V.O.C.: 0.04 lb/gal | MATERIAL V.O.C.: 5 g/l |
|------------------------------|------------------------|

SOLUBILITY IN WATER: SOLUBLE.

APPEARANCE: HIGHLY THIXOTROPIC LIQUID.

ODOR: PUNGENT AMMONIA ODOR.

## ===== SECTION 10 STABILITY &amp; REACTIVITY DATA=====

## STABILITY:

STABLE

CONDITIONS TO AVOID

## INCOMPATIBILITY (MATERIALS TO AVOID)

AVOID STRONG OXIDIZING AGENTS SUCH AS LIQUID CHLORINE, CONCENTRATED OXYGEN, SODIUM HYPOCHLORITE OR CALCIUM HYPOCHLORITE.

## HAZARDOUS DECOMPOSITION OR BY PRODUCTS:

THERMAL DECOMPOSITION MAY YIELD ACRYLIC MONOMER, CARBON MONOXIDE AND CARBON DIOXIDE. UNIDENTIFIED ORGANIC COMPOUNDS IN FUMES AND SMOKE MAY BE FORMED DURING COMBUSTION.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

## ===== SECTION 11 TOXICOLOGICAL INFORMATION=====

## EYE:

INCONSEQUENTIAL IRRITATION

## SKIN:

SKIN IRRITATION- RABBIT: PRACTICALLY NON-IRRITATING. DERMAL LD50-RABBIT: >5000

mg/kg.

**INGESTION:**

INFORMATION IS BASED ON THE TOXICITY PROFILES FOR A NUMBER OF ACRYLIC EMULSIONS THAT ARE COMPOSITIONALLY SIMILAR TO THIS PRODUCT

TYPICAL DATA ARE:

PRACTICALLY NON-IRRITATING

**INHALATION:**

IT IS POSSIBLE TO BREATHE THIS MATERIAL UNDER CERTAIN CONDITIONS OF HANDLING AND USE (FOR EXAMPLE, DURING MIXING). BREATHING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS USUALLY OCCUR AT AIR CONCENTRATIONS HIGHER THAN THE RECOMMENDED EXPOSURE LIMITS.

**SUBCHRONIC:**

HEADACHE, NAUSEA, ABDOMINAL PAIN AND IRRITATION OF THE NOSE, THROAT AND LUNGS. SKIN AND EYE IRRITATION.

**CHRONIC/CARCINOGENICITY:****TERATOLOGY:**

NO DATA

**REPRODUCTION:**

NO DATA.

**MUTAGENICITY:**

NO DATA.

**=====SECTION 12 ECOLOGICAL INFORMATION=====****ECOTOXICOLOGICAL INFORMATION:**

NO DATA AVAILABLE

**CHEMICAL FATE INFORMATION:**

NO DATA.

**SECTION 13 DISPOSAL CONSIDERATIONS:=====****INSTRUCTIONS:**

COAGULATE THE EMULSION BY THE STEPWISE ADDITION OF FERRIC CHLORIDE AND LIME. REMOVE THE CLEAR SUPERNATANT AND FLUSH TO A CHEMICAL SEWER. INCINERATE LIQUID AND CONTAMINATED SOLIDS IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

**=====SECTION 14 TRANSPORT INFORMATION=====****SHIPPING INFORMATION:**

DOT INFORMATION - 49 CFR 172.101

DOT DESCRIPTION: NOT REGULATED

**=====SECTION 15 REGULATORY INFORMATION=====**

(NOT MEANT TO BE ALL INCLUSIVE-SELECTED REGULATIONS REPRESENTED)

**US REGULATIONS:**

STATUS OF SUBSTANCES LISTS:

THE CONCENTRATIONS SHOWN IN SECTION II ARE MAXIMUM CEILING LEVELS (WEIGHT %) TO BE USED FOR CALCULATIONS FOR REGULATIONS.

FEDERAL EPA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY ACT OF 1980 (CERCLA) REQUIRES NOTIFICATION OF THE NATIONAL RESPONSE CENTER OF RELEASE OF QUANTITIES OF HAZARDOUS SUBSTANCES EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITIES (RQ'S) IN 40 CFR 302.4.

**COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:**

NONE KNOWN

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III  
REQUIRES EMERGENCY PLANNING BASED ON THE THRESHOLD QUANTITIES (TPQ'S)  
AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQ'S) IN 40 CFR 355  
(USED FOR SARA 302, 304, 311, AND 312)

**COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:**

NONE KNOWN

REQUIRES SUBMISSION OF ANNUAL REPORTS OF RELEASE OF TOXIC CHEMICALS  
THAT APPEAR IN 40 CFR 372 (FOR SARA 313). THIS INFORMATION MUST BE INCLUDED  
IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

**COMPONENTS THAT COULD REQUIRE REPORTING UNDER THE STATUTE: SEE SECTION II**

THE COMPONENTS OF THIS PRODUCT ARE LISTED OR EXCLUDED FROM LISTING ON THE

US TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

THE REMAINING PERCENTAGE OF UNSPECIFIED INGREDIENTS, IF ANY, ARE NOT CONTAINED  
IN ABOVE DE MINIMIS CONCENTRATIONS AND/OR ARE BELIEVED TO BE NON-HAZARDOUS  
UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), AND MAY  
CONSIST OF PIGMENTS, FILLERS, DEFOAMERS, WETTING AGENTS, RESINS, DRYERS,  
ANTI-BACTERIAL AGENTS, WATER AND/OR SOLVENTS IN VARYING CONCENTRATIONS.

**INTERNATIONAL REGULATIONS:****CANADIAN WHMIS:**

DOES NOT CLASSIFY AS HAZARDOUS.

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):**

NONE KNOWN

**EINECS:**

NO INFORMATION.

**STATE REGULATIONS:**

**CALIFORNIA PROPOSITION 65:** THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY  
THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986. THIS  
PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) KNOWN TO THE STATE OF CALIFORNIA

**A: CAUSE CANCER:**

NONE KNOWN

**B: CAUSE REPRODUCTIVE HARM:**

NONE KNOWN

**PENNSYLVANIA:**

NONE KNOWN

**NEW JERSEY:**

NONE KNOWN

**OTHER:**

NONE KNOWN

**=====SECTION 16 OTHER INFORMATION=====**

THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND.  
USERS SHOULD CONSIDER THESE DATA ONLY AS A SUPPLEMENT TO OTHER INFORMATION  
GATHERED BY THEM & DETERMINE THE SUITABILITY & COMPLETENESS OF INFORMATION FROM  
ALL SOURCES TO ASSURE PROPER USE & DISPOSAL OF THESE MATERIALS & THE SAFETY &  
HEALTH OF EMPLOYEES & CUSTOMERS.



# TROPICAL ASPHALT

## #113 HYDRO-ALUMINUM

**TROPICAL ASPHALT #113 HYDRO-ALUMINUM** is a durable, water-based, specially formulated aluminum asphaltic emulsion which has been developed to resist rigorous weather conditions while protecting roof surfaces and contributing to substantial energy savings. **HYDRO-ALUMINUM #113** has excellent elongation and tensile strength. When properly applied, **HYDRO-ALUMINUM #113** reflects up to 55% of the sun's rays. **#113** prevents premature aging and roof burnout by reducing UV degradation and thermal shock. **HYDRO-ALUMINUM #113** dries to a flexible, slightly textured film with a beautiful metallic finish, which will significantly slow down the aging of the roof system. **HYDRO-ALUMINUM #113** is recommended for use on metal, smooth BUR, mineral surface, emulsion, composition shingle, and modified roof systems.

**PREPARATION:** Surface must be dry and free of dirt, dust, oil, grease, wax, rust, chalky or loose paint, mildew and any other surface contamination that may inhibit adhesion. Repair cracks, breaks, open seams, and other roof imperfections with a heavy sealer such as #950 Eternamastic or recommended caulking or flashing compounds. When coating over newly applied asphalt emulsions such as #360 Asphalt Emulsion, proceed when the emulsion is thoroughly dry and cured. **HYDRO-ALUMINUM #113** performs best when applied over new asphalt emulsion surfaces. The curing time of asphalt emulsion is 3 to 10 days in warm, dry weather.

**APPLICATION:** Clean surfaces thoroughly before applying **#113 HYDRO-ALUMINUM**, scrubbing with a detergent solution if necessary to remove oils and other residues. Flush immediately with a strong stream of water. Make sure wastewater is disposed of in accordance with all applicable environmental safety regulations. Stir thoroughly to ensure uniform application by brush or spray. Roller is less effective. For best results spray apply. If brushing, use a 24-inch wide soft bristle broom. Apply uniformly over entire roof surface. **HYDRO-ALUMINUM #113** may be applied over a damp (not wet) surface. Apply only when coating will not be subject to heavy dew, rain, or moisture within 72 hours of application. It may be necessary to cool down a very hot roof by spraying water to prevent excessively fast drying of the coating.

**COVERAGE:** BUR—75 sq.ft. per gallon; Metal Roofing, smooth surfaces, emulsion surface—100 sq.ft. per gallon; Composition shingles and capsheet—35-50 sq.ft. per gallon. Coverage rates may vary depending on texture of surface.

**PRECAUTIONS:** Do not apply **#113 HYDRO-ALUMINUM** when surface or ambient temperature is less than 55°F, or if cold weather, rain or fog is expected within 72 hours of application. When applied properly, **#113** is an excellent water repellant product. Nevertheless, **#113** is not recommended on surfaces that pond water. Do not apply **#113 HYDRO-ALUMINUM** over asphalt emulsion prematurely. If **#113** is applied over uncured asphalt emulsion, it may turn gray, dark gray, or brown. Do not apply **#113** in the late afternoon or evening when the ambient temperature is low, if rain is imminent or dew is expected to form. This could cause graying, browning, or eggshell crazing. Drying time may vary depending upon wet film thickness, temperature, humidity, and air movement.

|                              |                                           |                                 |                     |
|------------------------------|-------------------------------------------|---------------------------------|---------------------|
| <b>Base:</b>                 | Asphalt Emulsion-ASTM D1227 Type III      | <b>Weatherability:</b>          | Excellent           |
| <b>Pigment:</b>              | Highly Polished Aluminum Flake            | <b>Flexibility:</b>             | Excellent           |
| <b>Flammability:</b>         | Wet-non flammable, Dry-Class A            | <b>Weight Per Gallon:</b>       | Approx. 8.5#        |
| <b>Spectral Reflectance:</b> | 88% avg. ASTM E97-77                      | <b>Application Temperature:</b> | Min. 55°F           |
| <b>Elongation:</b>           | 166% ASTM D412                            | <b>Tensile Strength:</b>        | 31 psi -ASTM D412   |
| <b>Drying Time:</b>          | (70°F @ 50% r.h.) @ 100 sq.ft./gal=1 hour | <b>Container Sizes:</b>         | 5 Gallon, 55 Gallon |

14435 Macaw Street  
La Mirada, CA 90638

714-739-1408 • FAX 714-670-1605  
Toll Free 1-877-827-2622

1904 S. 31<sup>st</sup> Avenue  
Hallandale, Florida 33009

954-983-3434 • FAX: 954-963-2033  
Toll Free: 1-800-432-2855

1225 Bral Drive ~ P. O. Box 5335  
Port Arthur, Texas 77640

409-727-0091-409-727-4647 FAX  
TOLL FREE 866-727-0091

# MATERIAL SAFETY DATA SHEET

## TROPICAL ASPHALT

|                                                |                                                           |                     |
|------------------------------------------------|-----------------------------------------------------------|---------------------|
|                                                |                                                           | #113 HYDRO ALUMINUM |
| Manufacturer: Tropical Asphalt, L.L.C.         | Identify (Trade Name As Used on Label): <u>TAPCO #113</u> |                     |
| Address: 14435 Macaw Street                    | MSDS Number*: 113-1                                       |                     |
| La Mirada, California 90638                    | CAS Number*: N/A - Mixture                                |                     |
| Phone Number (For Information): (714) 739-1408 | Date Prepared: May 25, 2000                               |                     |
| Emergency Phone Number: (714) 739-1408         |                                                           |                     |

### SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

| COMPONENTS - Chemical Name & Common Names (Hazardous Components 1% or Greater, Carcinogens 0.1% or Greater) | %*     | OSHA PEL              | ACGIH TLV             | OTHER LIMITS RECOMMENDED |
|-------------------------------------------------------------------------------------------------------------|--------|-----------------------|-----------------------|--------------------------|
| Water                                                                                                       | <65%   | N/A                   | N/A                   | N/A                      |
| Clay (Siliceous Materials)                                                                                  | <5%    | ND                    | ND                    | N/A                      |
| Crystalline Silica (as dust)                                                                                | <0.1%  | 0.01mg/m <sup>3</sup> | 0.01mg/m <sup>3</sup> | N/A                      |
| Aluminum Flake                                                                                              | <12.0% | 10 mg/m <sup>3</sup>  | 10 mg/m <sup>3</sup>  | N/A                      |
| Stoddard Solvent                                                                                            | <1.5%  | 525 mg/m <sup>3</sup> | 525 mg/m <sup>3</sup> | N/A                      |
| 1 - Nitropropane                                                                                            | <1.2%  | 90 mg/m <sup>3</sup>  | 90 mg/m <sup>3</sup>  | N/A                      |
| Asphalt (TLV is for fumes when heated)                                                                      | <18%   | 5 mg/M <sup>3</sup>   | 5 mg/M <sup>3</sup>   | N/A                      |

### SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

|                                                   |                                 |                                          |                |
|---------------------------------------------------|---------------------------------|------------------------------------------|----------------|
| Boiling Point:                                    | 212°F                           | Specific Gravity (H <sub>2</sub> O = 1): | 1.0            |
| Vapor Pressure (mm Hg and Temperature):           | 17                              | Melting Point:                           | ND             |
| Vapor Density (Air = 1):                          | >1                              | Evaporation Rate (Butyl Acetate = 1):    | <1             |
| Solubility in Water:                              | Dissolves in water              | % Volatile by Weight:                    | 60-65% (water) |
| Appearance and Odor: Silver/gray, viscous liquid. | Maximum V.O.C.: 100 grams/liter |                                          |                |

### SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

|                                                                                                                                                                                                                                                                                                                                |                                |                                        |           |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------|-----------|-----------|
| Flash Point: N/A<br>Method Used:                                                                                                                                                                                                                                                                                               | Auto-Ignition Temperature: N/A | Flammability Limits in Air % by Volume | LEL: 0.0% | UEL: 0.0% |
| Extinguisher Media: Not required (water-based liquid will not burn).                                                                                                                                                                                                                                                           |                                |                                        |           |           |
| Special Fire Fighting Procedures: Use breathing apparatus in enclosed areas. Do not use water hose stream, aluminum particles suspended in air may form an explosive mixture. If metal begins to burn with bright whitish glow do not attempt to extinguish it. Isolate it with dry sand or class D agent and let it burn out. |                                |                                        |           |           |
| Unusual Fire and Explosion Hazards: Dried product can burn. Use class B dry chemical or class D extinguishers. DO NOT USE HALOGENATED FIRE EXTINGUISHING AGENTS.                                                                                                                                                               |                                |                                        |           |           |

**SECTION 4 - REACTIVITY HAZARD DATA**

|                                                                                                                              |                            |
|------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Stability: Stable <input checked="" type="checkbox"/> Unstable _____                                                         | Conditions to Avoid: Heat. |
| Incompatibility (Materials to Avoid): Some acids, some caustics, halogenated hydrocarbons containing amines, lead or copper. |                            |
| Hazardous Decomposition Products: Smoke, carbon monoxide, carbon dioxide, aluminum oxide, ammonia, and nitrogen oxide.       |                            |
| Hazardous Polymerization: _____ May Occur <input checked="" type="checkbox"/> Will Not Occur                                 |                            |

**SECTION 5 - HEALTH HAZARD DATA**

|                                                                                                                                                                                                     |                                                                                                                                          |                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Routes of Entry: None<br>____ Inhalation: _____ Skin Absorption:<br>____ Ingestion: _____ Not Hazardous:                                                                                    |                                                                                                                                          | This product has not been classified as a carcinogen by the Occupational Safety and Health Administration (OSHA) or the National Toxicology Program (NTP). |
| Health Hazards                                                                                                                                                                                      | Acute: No evidence of adverse effects from available information.<br>Chronic: No evidence of adverse effects from available information. |                                                                                                                                                            |
| Signs and Symptoms of Exposure: Mild irritation or redness if prolonged exposure to skin and eyes.                                                                                                  |                                                                                                                                          |                                                                                                                                                            |
| Medical Conditions Generally Aggravated by Exposure: Repeated/continuous exposure can aggravate pre-existing eye and skin disorders.                                                                |                                                                                                                                          |                                                                                                                                                            |
| <b>EMERGENCY FIRST AID PROCEDURES:</b>                                                                                                                                                              |                                                                                                                                          |                                                                                                                                                            |
| Eye Contact: Flush eyes for 15 minutes with clean water.                                                                                                                                            |                                                                                                                                          |                                                                                                                                                            |
| Skin Contact: Wash with soap and water.                                                                                                                                                             |                                                                                                                                          |                                                                                                                                                            |
| Inhalation: Residual monomer vapors may be irritating to eyes, mucous membranes and respiratory tract. May produce symptoms of headache and nausea in poorly ventilated areas. Remove to fresh air. |                                                                                                                                          |                                                                                                                                                            |
| Ingestion: Should not occur. If swallowed, do not induce vomiting, consult physician.                                                                                                               |                                                                                                                                          |                                                                                                                                                            |

**SECTION 6 - CONTROL AND PROTECTIVE MEASURES**

|                                                                                                                                                                                                                                                                                                                                   |                                                                                                                     |                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Respiratory Protection (Specify Type): If mist is present or if sprayed in enclosed areas, use MSHA/NIOSH approved mask for mist.                                                                                                                                                                                                 |                                                                                                                     |                                                                                                                         |
| Protective Gloves: None required. Impervious to water, if desired.                                                                                                                                                                                                                                                                |                                                                                                                     | Eye Protection: Safety glasses or goggles to prevent splashing, available eyewash.                                      |
| Ventilation To Be Used:                                                                                                                                                                                                                                                                                                           | If spraying in enclosed area, maintain proper ventilation to keep air contaminant below permissible exposure limit. | Other Protective Clothing and Equipment: None normally required, protective clothing to avoid skin contact, if desired. |
| Hygienic Work Practices: Avoid prolonged or repeated contact with skin. Remove contaminated clothing and launder or dry clean before reuse. Cleanse skin thoroughly after contact, before breaks and meals. Product is readily removed from skin with waterless hand cleaners followed by thoroughly washing with soap and water. |                                                                                                                     |                                                                                                                         |

**SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES**

|                                                                                                                                                                                                                                                      |          |                |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------|--------------|
| Steps to be Taken if material is Spilled or Released: Dike and absorb with absorbent material. Prevent material from entering sewers or open bodies of water. ASSURE CONFORMITY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS. Let dry in safe place. |          |                |              |
| Waste Disposal Methods: Consult local, state, and federal regulations for permitted disposal and dispose of accordingly.                                                                                                                             |          |                |              |
| Precautions to be Taken in Handling and Storage: Avoid high temperatures and extreme heat, store containers in cool dry area away from direct sunlight. <b>KEEP FROM FREEZING.</b> Keep container upright & closed.                                  |          |                |              |
| Other Precautions and/or Special Hazards: Do not take internally. Avoid contact with skin/eyes. Close container after use. Keep out of reach of children.                                                                                            |          |                |              |
| HMIS Rating:                                                                                                                                                                                                                                         | Health-1 | Flammability-1 | Reactivity-2 |



# TROPICAL ASPHALT

## #360 ASPHALT EMULSION

**TROPICAL ASPHALT #360 Asphalt Emulsion** is a versatile, protective water based roof and waterproof coating. #360 is a solvent free, all purpose, non fibered coating ideal for use as a surface coating for built up roofing, metal, and masonry surfaces, and for pipes and tanks above or below ground level. #360 is made from asphalt emulsified with bentonite clay and water. #360 is cold-applied, corrosion-resistant, non-flammable while wet, and waterproof when dry, while also resisting most corrosive fumes and spray. #360 will not run, sag, crack, or "alligator," under the harshest of weather conditions. Complies with ASTM D-1227-95 Type III, Class I. #360 Asphalt Emulsion is available in 5-gallon pails, 55-gallon drums, and 250-gallon totes.

**PREPARATION:** All surfaces must be clean, have proper drainage, and be free from rust, dirt, and all other foreign matter. Remove rust with wire brush. A better bond will result if surface is damp when #360 is applied, but surface must be free of standing water. Clean all cracks, holes and damaged areas, repairing when necessary and allow repairs to thoroughly cure.

**APPLICATION:** Apply #360 by roofing brush, roller, or spray, evenly covering the surface. Two coats are recommended. Allow to dry completely between coats. Dry time is usually 6-24 hours in dry and hot weather conditions. In cool, damp weather drying will be slower, 2 – 7 days.

**COVERAGE:** #360 should be applied at a rate of 2 – 3 gallons per 100 square feet, dependent upon roof surface.

**PRECAUTION:** *DO NOT ALLOW #360 TO FREEZE.* Do not apply when ambient temperature is below 55°F, or if there is a threat of rain, heavy dew, or temperatures below 40°F within 24-48 hours. Do not heat container or store at temperatures greater than 120°F. Application over hot applied asphalt may not prevent alligatoring. This coating is not recommended over gravel, rubber or PVC sheet roofing, or old roofs that are too dry and brittle. When transporting this product, be sure the pail is secured and the lid is tight. Do not allow pail to tumble as this may loosen the lid and allow leakage to occur.

**CLEAN UP:** Fresh coating can be removed with warm water and soap. If material has started to dry, use mineral spirits or paint thinner.

**CAUTION:** DO NOT TAKE INTERNALLY! KEEP OUT OF REACH OF CHILDREN. Use protective measures to avoid contact with eyes and skin. If swallowed, CALL PHYSICIAN IMMEDIATELY! In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. GET MEDICAL ATTENTION! Close container after each use.

MAX V.O.C. 30 grams per liter

## TROPICAL ASPHALT

14435 Macaw Street  
La Mirada, CA 90638

714-739-1408 \* FAX 714-670-1605  
Toll Free 1-877-827-2622

1904 S. 31<sup>st</sup> Avenue  
Hallandale, Florida 33009

954-983-3434 \* FAX: 954-963-2033  
Toll Free: 1-800-432-2855

1225 Brai Drive ~ P. O. Box 5335  
Port Arthur, Texas 77640

409-727-0091~409-727-4647FAX  
Toll Free 866-727-0091

[www.tropicalasphalt.com](http://www.tropicalasphalt.com)



# MATERIAL SAFETY DATA SHEET

## TROPICAL ASPHALT

#360 Asphalt Emulsion

|                                                |                                                           |
|------------------------------------------------|-----------------------------------------------------------|
| Manufacturer: Tropical Asphalt, L.L.C.         | Identify (Trade Name As Used on Label): <u>TAPCO #360</u> |
| Address: 14435 Macaw Street                    | MSDS Number*: 360-1                                       |
| La Mirada, California 90638                    | CAS Number*: N/A - Mixture                                |
| Phone Number (For Information): (714) 739-1408 | Date Prepared: October 25, 1990                           |
| Emergency Phone Number: (714) 739-1408         | Revised On: October 1, 1999                               |

### SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

| COMPONENTS - Chemical Name & Common Names (Hazardous Components 1% or Greater, Carcinogens 0.1% or Greater) | %*    | OSHA PEL              | ACGIH TLV             | OTHER LIMITS RECOMMENDED |
|-------------------------------------------------------------------------------------------------------------|-------|-----------------------|-----------------------|--------------------------|
| Water                                                                                                       | <55%  | N/A                   | N/A                   | N/A                      |
| Clay (Siliceous Materials)                                                                                  | <10%  | ND                    | ND                    | N/A                      |
| Crystalline Silica (as dust)                                                                                | <1.0% | 0.01mg/M <sup>3</sup> | 0.01mg/M <sup>3</sup> | N/A                      |
| Asphalt (TLV is for fumes when heated)                                                                      | <45%  | 5 mg/M <sup>3</sup>   | 5 mg/M <sup>3</sup>   | N/A                      |

### SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

|                                                                      |                    |                                          |      |
|----------------------------------------------------------------------|--------------------|------------------------------------------|------|
| Boiling Point:                                                       | 212°F              | Specific Gravity (H <sub>2</sub> O = 1): | 1.02 |
| Vapor Pressure (mm Hg and Temperature):                              | 17                 | Melting Point:                           | ND   |
| Vapor Density (Air = 1):                                             | >1                 | Evaporation Rate (Butyl Acetate = 1):    | <1   |
| Solubility in Water:                                                 | Dissolves in water | Water Reactive:                          | No   |
| Appearance and Odor: Brown, viscous liquid with mild asphaltic odor. |                    |                                          |      |

### SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

|                                                                                                                              |                                |                                        |           |              |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------|-----------|--------------|
| Flash Point: N/A<br>Method Used:                                                                                             | Auto-Ignition Temperature: N/A | Flammability Limits in Air % by Volume | LEL: 0.6% | UEL: 15.3.0% |
| Extinguisher Media: Not required (water-based liquid will not burn).                                                         |                                |                                        |           |              |
| Special Fire Fighting Procedures: Use breathing apparatus in enclosed areas.                                                 |                                |                                        |           |              |
| Unusual Fire and Explosion Hazards: Dried product can burn. Use water, foam CO <sup>2</sup> , or dry chemical extinguishers. |                                |                                        |           |              |

## SECTION 4 - REACTIVITY HAZARD DATA

|                                                                                                                 |                                  |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------|
| Stability: Stable <input checked="" type="checkbox"/> Unstable                                                  | Conditions to Avoid: None known. |
| Incompatibility (Materials to Avoid): None known                                                                |                                  |
| Hazardous Decomposition Products: None known                                                                    |                                  |
| Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur | Conditions to Avoid: None.       |

## SECTION 5 - HEALTH HAZARD DATA

|                                                                                                                                                                                                |                                                                     |                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Routes of Entry: None<br><input type="checkbox"/> Inhalation: <input type="checkbox"/> Skin Absorption:<br><input type="checkbox"/> Ingestion: <input type="checkbox"/> Not Hazardous: |                                                                     | Carcinogen Listed in:<br><input type="checkbox"/> NTP <input type="checkbox"/> IARC Monograph <input type="checkbox"/> OSHA <input checked="" type="checkbox"/> Not Listed |
| Health Hazards                                                                                                                                                                                 | Acute: No evidence of adverse effects from available information.   |                                                                                                                                                                            |
|                                                                                                                                                                                                | Chronic: No evidence of adverse effects from available information. |                                                                                                                                                                            |
| Signs and Symptoms of Exposure: Mild irritation or redness if prolonged exposure to skin and eyes.                                                                                             |                                                                     |                                                                                                                                                                            |
| Medical Conditions Generally Aggravated by Exposure: Repeated/continuous exposure can aggravate pre-existing eye and skin disorders.                                                           |                                                                     |                                                                                                                                                                            |
| EMERGENCY FIRST AID PROCEDURES:                                                                                                                                                                |                                                                     |                                                                                                                                                                            |
| Eye Contact: Flush eyes for 15 minutes with clean water.                                                                                                                                       |                                                                     |                                                                                                                                                                            |
| Skin Contact: Wash with soap and water.                                                                                                                                                        |                                                                     |                                                                                                                                                                            |
| Inhalation: Should not occur. Get to fresh air.                                                                                                                                                |                                                                     |                                                                                                                                                                            |
| Ingestion: Should not occur. If large amount is swallowed, consult physician.                                                                                                                  |                                                                     |                                                                                                                                                                            |

## SECTION 6 - CONTROL AND PROTECTIVE MEASURES

|                                                                                                                                                                                                                                                                                                                                   |                                                                        |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Respiratory Protection (Specify Type): Not normally required.                                                                                                                                                                                                                                                                     |                                                                        |                                                                                     |
| Protective Gloves: None required. Impervious to water, if desired.                                                                                                                                                                                                                                                                |                                                                        | Eye Protection: Safety glasses or goggles to prevent splashing, available eye wash. |
| Ventilation To Be Used:                                                                                                                                                                                                                                                                                                           | None under normal conditions, mechanical is sprayed in enclosed areas. |                                                                                     |
| Other Protective Clothing and Equipment: None normally required.                                                                                                                                                                                                                                                                  |                                                                        |                                                                                     |
| Hygienic Work Practices: Avoid prolonged or repeated contact with skin. Remove contaminated clothing and launder or dry clean before reuse. Cleanse skin thoroughly after contact, before breaks and meals. Product is readily removed from skin with waterless hand cleaners followed by thoroughly washing with soap and water. |                                                                        |                                                                                     |

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

|                                                                                                                                                                                                                                                      |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Steps to be Taken if material is Spilled or Released: Dike and absorb with absorbent material. Prevent material from entering sewers or open bodies of water. ASSURE CONFORMITY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS. Let dry in safe place. |  |
| Waste Disposal Methods: Consult local, state, and federal regulations for permitted disposal and dispose of accordingly.                                                                                                                             |  |
| Precautions to be Taken in Handling and Storage: Avoid high temperatures and extreme heat Keep from freezing. Keep container upright & closed.                                                                                                       |  |
| Other Precautions and/or Special Hazards: Do not take internally. Avoid contact with skin/eyes. Close container after use. Keep out of reach of children.                                                                                            |  |

105.12



**ProMar®**

## EXTERIOR SOLID COLOR ACRYLIC LATEX STAIN A16 SERIES

### SURFACE PREPARATION

**Steel**—Remove rust and mill scale using sandpaper, steel wool, or other abrading method. Prime bare steel the same day as cleaned.

**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 using ConSeal Patches and Sealants.

**Bleeding Woods, Abraded Plywood, and Composition Board**—Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

**Other Woods, Plywood**—Sand exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth.

**Mill Glaze** is a glossy finish on new, smooth sawn wood or on the peaks of some textured wood. Remove this by sanding to allow the stain to penetrate.

**Mildew**—Remove before painting by washing with ProClean Professional™ Mildew Eliminator or 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/siding and windows, doors, and other through-wall openings and other exterior trim can be filled with Pro Select® Acrylic Latex Caulk after priming the surface.

### APPLICATION

Apply at temperatures above 50°F.

No reduction necessary.

#### **Brush**

Use a nylon/polyester brush, or appropriate stain applicator.

#### **Roller**

Use a ½" - 1" nap synthetic roller cover.

#### **Spray—Airless**

Pressure ..... 1800-2400 psi

Tip ..... .013"-.021"

### 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.

### CAUTIONS

Protect from freezing.

Non-photochemically reactive.

For exterior use only.

For vertical surfaces only.

Not for use on roofs, decks, or other surfaces where water will accumulate.

For wood decks and patios, use Cuprinol Solid Color Deck Stain

#### **LABEL CAUTIONS**

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.**  
LCE 10/15/01 A16W251 02 00

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 Sheet.



# Material Safety Data Sheet

Document Code: PMExterior-Latex  
Version: 01

Date of Preparation  
September 12, 2001

## Section 1 - Product and Company Identification

### PRODUCT NAME & NUMBERS

**PROMAR Exterior Solid Color Acrylic Latex Stain**  
Base C A16G203 Base A A16W201  
Cape Cod Red A16R201 Extra White A16W251  
Burgundy A16R233 Base B A16Y202  
White (A16W200)

### HMIS CODES

Health 1\*  
Flammability 0  
Reactivity 0

### MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

### EMERGENCY TELEPHONE NO.

(216) 566-2917

### INFORMATION TELEPHONE NO.

(216) 566-2902

## Section 2 - Composition/Information on Ingredients

| % WT.              | CAS No.    | Ingredient Name                         | Vapor Pressure |
|--------------------|------------|-----------------------------------------|----------------|
| 15-21              | 14808-60-7 | <b>Quartz</b>                           |                |
|                    |            | ACGIH TLV 0.05 mg/m3 as Respirable Dust |                |
|                    |            | OSHA PEL 0.05 mg/m3 as Respirable Dust  |                |
| 1-2                | 14464-46-1 | <b>Cristobalite</b>                     |                |
|                    |            | ACGIH TLV 0.05 mg/m3 as Respirable Dust |                |
|                    |            | OSHA PEL 0.05 mg/m3 as Respirable Dust  |                |
| 0-13               | 13463-67-7 | <b>Titanium Dioxide.</b>                |                |
|                    |            | ACGIH TLV 10 mg/m3 as Dust              |                |
|                    |            | OSHA PEL 10 mg/m3 Total Dust            |                |
|                    |            | OSHA PEL 5 mg/m3 Respirable Fraction    |                |
| 0-1                | 1314-13-2  | <b>Zinc Oxide</b>                       |                |
|                    |            | ACGIH TLV 10 mg/m3 as Dust              |                |
|                    |            | OSHA PEL 10 mg/m3 Total Dust            |                |
|                    |            | OSHA PEL 5 mg/m3 Respirable Fraction    |                |
| 0-0.5              | 1333-86-4  | <b>Carbon Black.</b>                    |                |
|                    |            | ACGIH TLV 3.5 mg/m3                     |                |
|                    |            | OSHA PEL 3.5 mg/m3                      |                |
| <2% due to tinting | 107-21-1   | <b>Ethylene Glycol.</b>                 |                |
|                    |            | ACGIH TLV 50 ppm CEILING 0.1 mm         |                |
|                    |            | OSHA PEL 50 ppm CEILING                 |                |
| <2% due to tinting | 1332-58-7  | <b>Kaolin</b>                           |                |
|                    |            | ACGIH TLV 2 mg/m3 as Respirable Dust    |                |
|                    |            | OSHA PEL 10 mg/m3 Total Dust            |                |
|                    |            | OSHA PEL 5 mg/m3 Respirable Fraction    |                |
| <2% due to tinting | 14807-96-6 | <b>Talc</b>                             |                |
|                    |            | ACGIH TLV 2 mg/m3 as Respirable Dust    |                |
|                    |            | OSHA PEL 2 mg/m3 as Respirable Dust     |                |

### Section 3 – Hazards Identification

#### ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

#### EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and 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

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Do not induce vomiting. Get medical attention immediately.

### Section 5 – Fire Fighting Measures

|             |      |      |
|-------------|------|------|
| FLASH POINT | LEL  | UEL  |
| None        | N.A. | N.A. |

#### FLAMMABILITY CLASSIFICATION

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.

#### 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 and remove with inert absorbent.

### Section 7 – Handling and Storage

DOL 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 breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

These coatings 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./m<sup>3</sup> (total dust), 3 mg./m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg./m<sup>3</sup> (total dust), 5 mg./m<sup>3</sup> (respirable fraction).

Removing or disturbing old paint from interior or exterior surfaces by sanding, scraping, abrading or other means may produce dust, debris or fumes that contain lead. Exposure to lead dust, debris or fumes may cause brain damage or other adverse health effects, especially in children and pregnant women. Structures built before 1978 should be tested by a licensed inspector prior to removing or disturbing old paint. 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                               | 10.0-10.7 lb/gal               | EVAPORATION RATE    | Slower than Ether |
| SPECIFIC GRAVITY                             | 1.20-1.29                      | VAPOR DENSITY       | Heavier than Air  |
| BOILING POINT                                | 212-477 °F                     | MELTING POINT       | N.A.              |
| VOLATILE VOLUME                              | 68-72 %                        | SOLUBILITY IN WATER | N.A.              |
| pH                                           | 9.0                            |                     |                   |
| VOLATILE ORGANIC COMPOUNDS (VOC Theoretical) |                                |                     |                   |
| 0.8-0.9 lb/gal                               | Less Federally Exempt Solvents |                     |                   |
| 0.3 lb/gal                                   | 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

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

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.

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.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

### TOXICOLOGY DATA

| CAS No.    | Ingredient Name          |     |     |                 |
|------------|--------------------------|-----|-----|-----------------|
| 14808-60-7 | <b>Quartz</b>            |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | Not Established |
| 14464-46-1 | <b>Cristobalite</b>      |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | Not Established |
| 13463-67-7 | <b>Titanium Dioxide.</b> |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | >7500 mg/kg     |
| 1314-13-2  | <b>Zinc Oxide</b>        |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | Not Established |
| 1333-86-4  | <b>Carbon Black.</b>     |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | >15400 mg/kg    |
| 107-21-1   | <b>Ethylene Glycol.</b>  |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | 4700 mg/kg      |
| 1332-58-7  | <b>Kaolin</b>            |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | Not Established |
| 14807-96-6 | <b>Talc</b>              |     |     |                 |
|            | LC50                     | RAT | 4HR | Not Established |
|            | LD50                     | RAT |     | Not Established |

## Section 12 – Ecological Information

### ECOTOXICOLOGICAL INFORMATION

No data available.

## Section 13 – Disposal Considerations

### WASTE DISPOSAL METHOD

Waste from these products 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

DOT PROPER SHIPPING DESCRIPTION: Paint and Related Materials, NOIBN

IATA/IMDG SHIPPING DESCRIPTION: Paint and Related Materials, NOIBN

## Section 15 – Regulatory Information

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

| CAS No.  | CHEMICAL/COMPOUND | % by WT | % Element |
|----------|-------------------|---------|-----------|
| 107-21-1 | Ethylene Glycol.  | <2      |           |
|          | Zinc Compound.    | 0-1     | 0-0.9     |

CALIFORNIA PROPOSITION 65

WARNING: These products contain a chemical known to the State of California to cause cancer.

TSCA CERTIFICATION

All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

## Section 16 – Other Information

CANADIAN DISTRIBUTOR: Sherwin-Williams Canada  
180 Brunel Rd.  
Mississauga, ON L4Z 1T5

NOTE: These products have been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no



Stain



## PRODUCT DATA SHEET

### Exterior Acrylic Solid Color Rustic Stain

4301

#### GENERAL INFORMATION

##### Product Description

A premium quality, acrylic solid stain designed for exterior use over wood, masonry, concrete, stucco, properly primed metal and previously painted surfaces. Provides excellent protection for rustic wood surfaces such as rough sawn lumber, vertical shakes and shingles, fences, and masonite or hardboard siding. It hides the surface without obscuring the grain, texture or rustic effects.

##### Performance Characteristics

- Will not obscure grain, texture or rustic effects
- Easy application
- Superior color retention
- Durable
- Easy clean-up

##### Surface Preparation

###### Previously Painted Surfaces

All surfaces must be clean, dry and free from dirt, wax, grease, oil, chalk, mildew and loose or peeling paint. Nail holes, cracks or other surface imperfections should be properly filled, sanded smooth and dusted clean. All mildew, mold and fungi must be completely and thoroughly removed. Moderately to heavily chalked surfaces require removal of chalk and priming with a surface conditioner. Glossy surfaces must be sanded and dusted clean. Always wear a dust mask when sanding.

###### Masonry

New masonry must cure 30 days and be free of efflorescence and alkali before painting. If pH is greater than 8.0, prime with Morwear 2099 100% Acrylic Masonry Primer. For best results on masonry, concrete and stucco in hot weather, hose down with water to remove dust and dirt and to pre-wet surface. Allow excess water to evaporate before applying finish coat.

###### Metal

All metal surfaces must be clean and free of rust, grease, oil, dirt and other foreign matter. If any loose or peeling material is present, it must be thoroughly removed by means of scraping, sanding or wire brushing. Prime all bare spots with Morwear Rust Inhibiting Alkyd Metal Primer 4182 Red Oxide or 4183 White.

##### New Wood

Glossy surfaces must be sanded and dusted clean. Sand rough areas. All bare wood must be wiped clean and primed with Morwear 485 Oil Base Wood Primer with Busan or 2098 100% Acrylic Stain Blocking Primer.

##### Application Suggestions

IMPORTANT! READ BEFORE APPLICATION:

If more than one package of the same color is to be used, mix together before applying to ensure uniform color and finish. Apply paint to a small test area on surface for color approval BEFORE painting entire surface. Seller is not responsible for color differences after paint is applied.

STIR WELL BEFORE USING. May be applied by brush, roller or spray. When spraying, follow spray equipment manufacturer's recommendations carefully. Apply two full coats for maximum durability. Apply only when the temperature of the surface, material and air is above 50 F. Do not apply if rain or heavy dew is expected within 24 hours.

**NOTICE:** Some redwood, cedar and fir may contain excessive amounts of *Tannins* (water soluble color staining bodies) which can bleed through and discolor the finish, especially white and light colors. If this occurs, allow the paint to dry thoroughly. Then apply one coat of stain-inhibiting primer to the discolored areas. Allow primer to dry thoroughly. Apply an additional coat of finish.

**HEALTH & SAFETY INFORMATION****CAUTION!**

Do not take internally. Use only with adequate ventilation. Avoid breathing vapor, spray mist or sanding dust. CONTAINS CRYSTALLINE SILICA. Sanding dust may cause eye and skin irritation. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Long term exposure to Crystalline Silica may cause lung damage and cancer; risk depends upon duration and level of exposure to sanding dust.

*This product contains chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm (Prop. 65).*

**Disposal Information**

Please use all of the paint before disposing of the container. If no paint can be poured or drained from the container, dispose of the dry, empty container as you would normal household waste. Store any excess product in a tightly sealed container away from heat or flames. To dispose of a full or partially full container of paint, contact your city or county government for hazardous materials collection locations and operating hours. Do not dispose of excess paint in any sanitary or storm water sewer system.

**Environmental Considerations**

Formulated without lead, mercury or chromium.

**TECHNICAL INFORMATION****APPLICATION EQUIPMENT**

Brush Type: Polyester, Nylon  
 Roller Cover: Synthetic  
 Nap size:  
     Light Texture 3/8" – 1/2" nap  
     Medium Texture 1/2" – 3/4" nap  
     Heavy Texture 3/4" – 1" nap  
 Spray Equipment: Heavy-duty piston  
     2000 PSI minimum  
 Spray Tip Size: .015 to .019  
 P.S.I.: 2000  
 Filter: 60 mesh

**VISCOSITY:** 95-100 KU  
**GLOSS:** Flat

**THINNING:** If necessary, add no more than 1/2 pint of water per gallon. DO NOT USE PAINT THINNER.

**DRY TIME:** Dries in 30 minutes to one hour depending on temperature and humidity. Allow four hours before recoating.

**DESIRED FILM THICKNESS:**

Wet - 4.6 mils  
 Dry - 1.9 mils

**COVERAGE:** Approximately 300-400 square feet per gallon depending on surface texture and porosity.

**CLEAN-UP:** Clean brushes, rollers and equipment with soap and water. Clean spills and spatter immediately.

**WEIGHT PER GALLON:** 11.53

**FLASH POINT:** None

**CONTENT ANALYSIS:**

Solids by volume 42.43%  
 Solids by weight 56.75%

Pigment by Weight: 38.82%  
 Vehicle by Weight: 61.18%

**EQUIVALENT FEDERAL SPECIFICATIONS:**

Meets the performance requirements, not necessarily composition, of Federal Specification: TT-S-001992

**INGREDIENTS**

|                          |                  |
|--------------------------|------------------|
| Titanium Dioxide         | CAS # 13463-67-7 |
| Acrylic Resin Emulsion   | 25067-01-0       |
| Styrene Acrylic Emulsion | Contents Unknown |
| Calcium Carbonate        | 1317-65-3        |
| Water                    | 7732-18-5        |
| Zinc Compound            | 7440-66-6        |
| Ethylene Glycol          | 107-21-1         |
| Crystalline Silica       | 14808-60-7       |

Revised 1/14/2003



Note: To the best of our knowledge, the information contained herein is accurate. However, Smiland Paint company assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any information or material for the use contemplated, the manner of use and whether there is any infringement of patents is the sole responsibility of the user. Additional information may be obtained thorough your local sales representative or the Morwear Sales Office.

**Smiland Paint Company 620 Lamar Street Los Angeles, California 90031 (800) 605-2627**

PRODUCT NAME: PASTEL BASE, EXT ACRYLIC RUSTIC STAIN  
PRODUCT CODE: 4301-01

HMIS CODES: H F R P  
1\*0 0 B

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: SMILAND PAINT COMPANY  
ADDRESS : 620 LAMAR STREET  
LOS ANGELES, CA. 90031-2513

EMERGENCY PHONE : (800) 535-5053 DATE PRINTED : 10/15/02  
INFORMATION PHONE : (323) 222-7000 NAME OF PREPARER : Gregg Lindblom  
SUPERSEDES DATE : April 12, 1999 REVISION DATE : December 5, 2000

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

| REPORTABLE COMPONENTS                                  | CAS NUMBER      | VAPOR PRESSURE<br>mm Hg @ TEMP | WEIGHT<br>PERCENT |
|--------------------------------------------------------|-----------------|--------------------------------|-------------------|
| ISOMORPHIC HYDROUS ALUMINUM POTASSIUM SILICATE         | 12001-26-2      | N/A                            | N/A               |
| ACGIH/TWA: 20mppcf; ACGIH/STEL: 3mg/m3                 | RESPIRABLE DUST |                                | 2.06              |
| * ZINC COMPOUND(S)                                     | 7440-66-6       | N/A                            | N/A               |
| ACGIH TLV: 10MG/M3 AS DUST; ACGIH PEL: 10MG/M3 AS DUST |                 |                                | 1.6               |
| * ETHYLENE GLYCOL                                      | 107-21-1        | .06                            | 77 F              |
| ACGIH TLV: 50PPM                                       |                 |                                | 1.5               |
| GLYCOL ETHER                                           | TRADE SECRET    | N/E                            | N/E               |
| NONE ESTABLISHED                                       |                 |                                | 0.11              |

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 387 F SPECIFIC GRAVITY (H2O=1): 1.38  
VAPOR DENSITY: Lighter than air. EVAPORATION RATE: Slower than ether.  
COATING V.O.C.: 97 g/l MATERIAL V.O.C.: 43 g/l  
SOLUBILITY IN WATER: Complete.  
APPEARANCE AND ODOR: Typical for water based paints.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: Not Applicable. METHOD USED: Not Applicable.

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 3.2 UPPER: 15.3

EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, or Water Fog.

SPECIAL FIREFIGHTING PROCEDURES  
Cool containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS  
Closed container exposed to high temperatures may explode or burst due to build up of steam pressure.

===== SECTION V - REACTIVITY DATA =====

STABILITY: Stable.  
CONDITIONS TO AVOID  
None.

INCOMPATIBILITY (MATERIALS TO AVOID)  
Avoid contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

May form toxic materials on thermal decomposition including Carbon Dioxide, Carbon Monoxide, and various hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Adverse health effects from vapors or spray mists in poorly ventilated areas may include irritation of the mucous membranes of the nose, throat, and respiratory tract and symptoms of headache and nausea.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

EYES: In direct contact, may cause irritation. SKIN: Prolonged and repeated contact with product may cause skin irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Redness, drying of the skin, or other signs of irritation or contact dermatitis.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: May cause irritation to skin and eyes, gastrointestinal irritation, nausea, and vomiting. CHRONIC: Prolonged or repeated exposure above TLV may result in permanent brain and nervous system damage.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

May be aggravating to some skin and respiratory conditions, and to pre-existing liver and/or kidney disorders.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with large amounts of water for at least 15 minutes. Take to a physician. SKIN: Wash affected areas with soap and water. Remove contaminated clothing. If irritation persists, consult physician. INHALATION: Remove to fresh air. Treat symptomatically. Consult physician. INGESTION: Drink 1 or 2 glasses of water to dilute. DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike, contain, or absorb with inert materials. Transfer to containers for recovery or disposal. Prevent runoff into sewers, streams, or other bodies of water.

WASTE DISPOSAL METHOD

Dispose of in accordance with all local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not expose to extremes in temperature. Avoid exposure to high temperatures. DO NOT ALLOW TO FREEZE.

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. Avoid prolonged or repeated exposure to levels above TLV. KEEP OUT OF REACH OF CHILDREN.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

Not normally required. If TLV is exceeded, use NIOSH/MSHA approved organic

vapor and mist, supplied air, or self-contained breathing apparatus. Avoid breathing sanding dust.

VENTILATION

Use adequate mechanical (general and/or local) ventilation to maintain exposure below TLV.

PROTECTIVE GLOVES

Wear resistant gloves such as polyethylene.

EYE PROTECTION

Use chemical splash goggles or OSHA permitted safety glasses.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Wear impervious clothing. Eye wash station.

WORK/HYGIENIC PRACTICES

Wash hands before eating or using restrooms. Remove and wash all contaminated clothing before reuse.

===== SECTION IX - DISCLAIMER =====

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.



## PRODUCT INFORMATION

## ACRI-FLAT® 100% Acrylic Exterior Wood Stain & Masonry Flat Paint W 704

**DESCRIPTION:** ACRI-FLAT is a 100% acrylic flat paint that is easy to apply, provides dependable performance, excellent color retention and good grain crack resistance for long-term exterior durability. Its "dead-flat" finish minimizes surface imperfections making it an ideal flat to use on areas where previous patchwork has been performed. **ACRI-FLAT** is extremely versatile and is ideally suited as a self-priming solid color stain for new or previously painted rough sawn wood and is also recommended for use on properly prepared masonry, concrete, tilt-up, block, stucco, plaster and exterior metal.

### SPECIFICATIONS

#### SOLVENT TYPE

Waterborne

#### RESIN TYPE

100% acrylic

#### FINISH

Flat. 1-2% on a 60° meter.

#### COLORS

Stock colors: White. Other colors can be special ordered or store mixed.

#### BASES

White, medium, ultra deep

#### VISCOSITY AT 77°F (25°C)

105-110 Ku

#### VOC CONTENT

120 g/L (as supplied)

#### SOLIDS BY VOLUME

40.0%

#### SOLIDS BY WEIGHT

56.0%

#### WEIGHT PER GALLON

11.30 lbs.

#### COMPOSITION BY WEIGHT

Pigment - 35.0%

Vehicle - 65.0%

\*Prime pigments ..... 21.0 Acrylic resins.....17.0

Reinforcing pigments ... 14.0 Water & additives.....46.0

*\* Prime pigments include titanium dioxide (TiO<sub>2</sub>), plus all other pigments directly adding to the hiding power of this paint.*

#### RECOMMENDED FILM THICKNESS PER COAT

Wet: 3.8 mils

Dry: 1.5 mils

#### PRACTICAL COVERAGE PER COAT AT RECOMMENDED DRY FILM THICKNESS

300-400 sq. ft. per gallon, depending on surface conditions.

#### AVERAGE DRY TIME AT 77°F (25°C)

To touch: 2 hours

Tack-free: 2-3 hours

Recoat: 4 hours

To handle: 8 hours

#### APPLICATION EQUIPMENT

Brush, roller, airless spray

#### PACKAGING

One-gallon, five-gallon containers

#### MATERIAL SAFETY DATA SHEET

Form #1

#### SURFACE PREPARATION

All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, high-pressure washing or other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should match the surrounding surface texture. If efflorescence exists, remove all noticeable deposits and prime the entire surface with **Super-Loc (W 718) - Waterborne Epoxy Primer or Eff-Stop (W 709) - Acrylic Masonry Sealer**.

#### SPECIAL INSTRUCTIONS

- Certain woods, such as redwood, cedar and spruce contain water-soluble extracts (tannins) that may discolor lighter colors. In these situations it is recommended to prime the wood with **E-Z Prime (W 708) - Exterior Acrylic Wood Primer** before applying **Acri-Flat (W 704)**.
- Do not apply when the air or surface temperature is below 50°F.

#### THINNING RECOMMENDATIONS

Not recommended.

#### CLEANUP

Water

#### PRIMERS

##### MASONRY

Stucco:

**Super-Loc (W 718) or Eff-Stop (W 709)**

Tilt-up concrete:

**Super-Loc (W 718) or Eff-Stop (W 709)**

Poured-in-place:

**Super-Loc (W 718) or Eff-Stop (W 709)**

Concrete block:

1st coat: **Blocfil (W 304) or (W 305)**

2nd coat: **Super-Loc (W 718) or Eff-Stop (W 709)**

**709)**

Brick:

**Super-Loc (W 718) or Eff-Stop (W 709)**

Smooth trowel:

**Super-Loc (W 718) or Enduraseal (W 360)**

##### WOOD

Smooth trim:

**Self priming (See Special Instructions)**

Rough-sawn:

**Self priming (See Special Instructions)**

##### SYNTHETIC WOOD

Masonite:

**Compo (42-1) or M-P Prime (W 713)**

Hardboard:

**Compo (42-1) or M-P Prime (W 713)**

MDO siding:

**Compo (42-1) or M-P Prime (W 713)**

T-111 siding:

**E-Z Prime (W 708)**

##### METAL

Ferrous:

**Corrobar (43-5) or Bloc-Rust (43-4)**

Nonferrous:

**Galv-Alum (QD 43-7) or M-P Prime (W 713))**

Galvanized:

**Galv-Alum (QD 43-7) or M-P Prime (W 713)**


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## R&D center

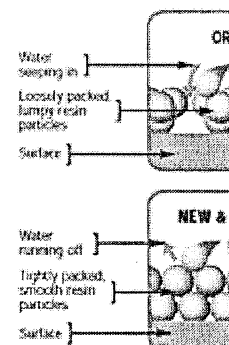
### Dunn-Edwards R&D center: dedicated to innovation

Dunn-Edwards has been a recognized leader in the paint industry throughout its 75-year history. Today we are more committed than ever to delivering quality products and creative services to meet the needs of our customers.

### How New & Improved Acri-Flat Repels Water

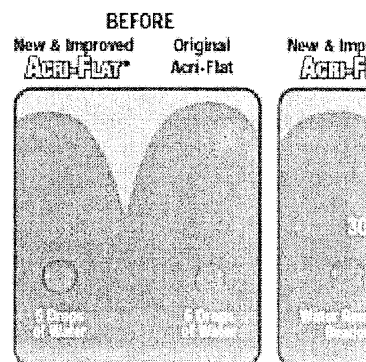


New & Improved Acri-Flat's unique resin particles create a tighter paint film that does not allow water to collect and seep into the surface. As a result, New & Improved Acri-Flat forces water to bead and run off the surface.



### How We Compared New & Improved Acri-Flat Vs. The Original Acri-Flat:

- Step 1:** New & Improved Acri-Flat is applied side-by-side with original Acri-Flat on white charts.
- Step 2:** After allowing the paints to dry for 24 hours, five drops of water are then placed on each paint.
- Step 3:** After 30 minutes, the panels are evaluated to see if the water remains beaded or has seeped into the surface.



These are digital photographs of the actual test results. To view the actual test results, please contact Marketing Department.

| FEATURES & BENEFITS |                                                  | PROPERTIES              |                                                                                                     |
|---------------------|--------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------|
| <b>FEATURE</b>      | Outstanding water repellency                     | <b>Viscosity</b>        | 105-110 KU                                                                                          |
| <b>BENEFIT</b>      | Painted surface looks newer longer               | <b>Density</b>          | 11.40 lbs/gal                                                                                       |
| <b>FEATURE</b>      | Superior efflorescence resistance                | <b>Solids by Weight</b> | 56%                                                                                                 |
| <b>BENEFIT</b>      | Keeps salt deposits (white fuzz) from developing | <b>Solids by Volume</b> | 40%                                                                                                 |
| <b>FEATURE</b>      | Excellent color retention                        | <b>Spread Rate</b>      | 300-400 sq. ft.<br>(Spread rate will vary depending on met<br>surface texture and surface porosity) |
| <b>BENEFIT</b>      | Colors resist fading                             | <b>Specular Gloss</b>   | 1-2% on a 60                                                                                        |
| <b>FEATURE</b>      | Very good grain crack resistance                 | <b>Dry Time at 77°F</b> | To Touch: 1-2<br>Recoat: 4 -6 ho                                                                    |
| <b>BENEFIT</b>      | Protects new and previously painted wood         | <b>Clean-Up</b>         | Water                                                                                               |
| <b>FEATURE</b>      | "Dead flat" finish                               | <b>VOC</b>              | 70 g/L                                                                                              |
| <b>BENEFIT</b>      | Minimizes surface imperfections                  |                         |                                                                                                     |
| <b>FEATURE</b>      | Easy to apply                                    |                         |                                                                                                     |
| <b>BENEFIT</b>      | Convenient                                       |                         |                                                                                                     |

#### PROUD USER TESTIMONIALS

*"Your New Acri-Flat has great brushability and demonstrates excellent water repellency compared to o*  
- Greg Brink - President, Vertex Coatings, Inc., Corona, CA

*"The New Acri-Flat is easier to apply and has less spatter than original Acri-Flat."*  
- Lewis Graner, Graner Painting, Casa Grande, AZ

*"Switching to New & Improved Acri-Flat made a surfactant-leaching problem on a house with wood sid*  
- Tom McCaslin, Palmer Painting Company, La Mesa, CA

#### Learn about other R&D topics

[W 411 Suprema's superior scrub resistance](#)

[W 401 Decovel & stain resistance](#)

[W 708 E-Z Prime & tannin resistance](#)

[W 901 Permasheen & block resistanc](#)

#### Important paint research

Select a topic to learn more about Dunn-Edwards and industry research on key paint issues. Simply do sheets for your reference.

[Ethylene Glycol](#)

[Factors that Influence Touch-Up](#)

[Painting in Hot and Cold](#)



## MATERIAL SAFETY DATA SHEET

DUNN-EDWARDS CORPORATION  
4885 EAST 52ND PLACE  
LOS ANGELES, CA 90040-2828

DATE OF PREPARATION: 04/01/99

EMERGENCY TELEPHONE NUMBER:  
(800) 733-3866, EXTENSION 2240

INFORMATION TELEPHONE NUMBER:  
(323) 771-3330, EXTENSION 2240

### SECTION I - PRODUCT IDENTIFICATION

MSDS FORM #1  
GENERIC WATERBORNE LATEX COATINGS  
(SEE INDEX FOR PRODUCTS COVERED)

HMIS CODES: H F R PP  
1 0 0 E

U.S. DOT SHIPPING DESCRIPTION: (Non-Regulated)

### SECTION II - HAZARDOUS INGREDIENTS

| INGREDIENT            | CAS NUMBER | %WT | ACGIH          | OSHA EXPOSURE LIMITS |                   |             |                   | VAPOR PRESS<br>mmHg @ TEMP |
|-----------------------|------------|-----|----------------|----------------------|-------------------|-------------|-------------------|----------------------------|
|                       |            |     | TLV/TWA<br>PPM | TWA<br>PPM           | MG/M <sup>3</sup> | STEL<br>PPM | MG/M <sup>3</sup> |                            |
| Propylene Glycol      | 00057-55-6 | <5% | -              | -                    | -                 | -           | -                 | 0.1 @ 68°F                 |
| Texanol Ester Alcohol | 25265-77-4 | <5% | -              | -                    | -                 | -           | -                 | 0.1 @ 68°F                 |

### SECTION III - PHYSICAL AND CHEMICAL DATA

BOILING RANGE: 200-225°F  
SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.4  
SOLUBILITY IN WATER: Partly soluble.  
APPEARANCE AND ODOR: Liquid dispersion with mild odor.

EVAPORATION RATE: Slower Than Ether.  
VAPOR DENSITY: Heavier Than Air.  
VOLATILE VOLUME: 60%

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: N/A  
FLASH POINT: N/A LEL: N/A UEL: N/A  
EXTINGUISHING MEDIA: Foam, Alcohol Foam, CO<sub>2</sub>, Dry Chemical, Water Fog.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Liquid material is non-combustible, but dried films are capable of supporting combustion when in contact with open flames. Closed containers can develop internal pressure and may rupture when subjected to extreme heat.  
SPECIAL FIREFIGHTING PROCEDURES: Use self-contained breathing apparatus in confined spaces. Observe recommended procedures for handling ordinary combustible materials.

### SECTION V - HEALTH HAZARD DATA

#### POTENTIAL ROUTES OF ENTRY / SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: Exposure to high vapor concentration may irritate mucous membranes and respiratory tract. Extreme overexposure may produce dizziness, headache, and nausea.  
EYE CONTACT: Direct contact may cause eye irritation, redness, and tearing.  
SKIN CONTACT: Prolonged contact may cause transient reddening of the skin.  
SKIN ABSORPTION: Available information provides no evidence of adverse effects.  
INGESTION: May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.  
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing eye, skin, and respiratory system disorders, and unusual allergic sensitivity.

CHRONIC OR DELAYED HEALTH HAZARDS: Available information provides no evidence of chronic or delayed health hazards associated with exposure to this product.

CARCINOGENICITY: NTP? NO. IARC MONOGRAPHS? NO. OSHA REGULATED? NO.

EMERGENCY AND FIRST AID PROCEDURES: If affected by inhalation of vapor, move victim to fresh air. If not breathing, apply artificial respiration and call emergency medical care. For eye contact, flush eyes with fresh water for at least 15 minutes. If irritation persists, seek medical attention. For

skin contact, wash thoroughly with soap and water. Remove any contaminated clothing. If swallowed, have victim drink enough fresh water to ensure dilution. Call emergency medical care.

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**SECTION VI - REACTIVITY DATA**

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STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion can produce carbon monoxide and/or carbon dioxide.

CONDITIONS TO AVOID: Avoid storage or use at temperatures below 40°F. Avoid freezing.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid water-reactive materials, strong oxidizers, acids and alkalis.

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**SECTION VII - PRECAUTIONS FOR SAFE HANDLING, STORAGE, AND DISPOSAL**

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PRECAUTIONS FOR HANDLING AND STORAGE: Keep containers closed when not in use. Do not handle or store near heat, flame, or strong oxidizers, acids and alkalis. Store in cool, well-ventilated area. Rotate stock, use older material first. Inspect all containers for leaks.

STEPS TO TAKE IF MATERIAL IS RELEASED OR SPILLED: Dike and absorb spilled liquid with inert material such as clay granules, sand, earth, or sawdust. Use rags to clean up small amounts of spilled material.

WASTE DISPOSAL METHOD: Collect contaminated absorbent material and rags into a suitable container and dispose in accordance with all applicable local, state, and federal regulations.

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**SECTION VIII - CONTROL MEASURES FOR SAFE USE**

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RESPIRATORY PROTECTION: For spray application, use particulate filter mask to avoid breathing spray mist. Exposed persons with unusual allergic sensitivity may need organic vapor respirator (NIOSH/MSHA TC 23C or equivalent).

VENTILATION: For interior use, general mechanical ventilation may be sufficient to disperse vapor. Otherwise, open doors and windows or use portable fans to provide local exhaust.

EYE PROTECTION: Use safety glasses, goggles, or face shield to protect eyes.

PROTECTIVE GLOVES: Use waterproof gloves (e.g., latex, vinyl, rubber, neoprene) to avoid skin contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Waterproof headcovering and general protective clothing are recommended for protection as necessary.

WORK/HYGIENIC PRACTICES: Wash hands and face before eating.

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**SECTION IX - SPECIAL CAUTIONS**

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Do not store in areas subject to freezing temperatures. Keep above 40°F at all times. Use only with adequate ventilation or protection. Avoid breathing spray mist or vapor. Do not ingest. Avoid contact with skin. Close container after each use. Keep out of reach of children.

\*\*\*\*\* DISCLAIMER \*\*\*\*\*

THE INFORMATION CONVEYED ABOVE, ALTHOUGH OBTAINED FROM SOURCES WE CONSIDER RELIABLE, IS FURNISHED BY DUNN-EDWARDS CORPORATION WITHOUT ANY WARRANTY (WHETHER EXPRESS OR IMPLIED) AS TO ITS ACCURACY, ADEQUACY, OR APPLICABILITY TO ANY PARTICULAR NEEDS OR CIRCUMSTANCES.

# OKON<sup>®</sup>

## DECK STAIN

OK-720

### PRODUCT DESCRIPTION

OKON DECK STAIN is a water based water repellent and wood stain for horizontal wood applications. OKON DECK STAIN maintains a dry condition by preventing the penetration of moisture into wood, which discourages rotting and mildewing. It also screens out the damaging ultraviolet (UV) rays while enhancing the beauty of the wood's grain and texture. A wide range of semi-transparent colors can be custom mixed using universal coloring systems.

### DESIGNED FOR

- Decks
- Milled (smooth) lumber
- Outdoor furniture
- Pressure treated lumber
- Rough lumber
- Shingles

### FEATURES

- Easy application
- Fast drying
- Low odor
- Low VOC
- Non-flammable
- Unlimited color selection
- Water clean-up

### LIMITATIONS

- Do not use clear.
- Do not attempt to make a semi-solid or a solid stain when tinting OKON DECK STAIN.
- Do not apply OKON DECK STAIN when freezing conditions are anticipated within 24 hours of application.
- Avoid heavy traffic for a minimum of 24 hours.

### TINTING

• Add a minimum of 2 oz, or a maximum of 8 oz of colorant per gallon to OKON DECK STAIN. Colorant adds protection against the harmful effects of ultra violet (UV) radiation while enhancing the beauty of wood's grain and texture.

- Always check color on a sample of the substrate to be used prior to applying on finished project.

### TECHNICAL DATA

- Chemistry Modified acrylic emulsion
- Clean-up Water
- Dry time @ 25°C (77°F) & 50% RH:
  - To touch - 2 hours
  - Foot traffic - 24 hours
- Flash point N/A
- Percent solids 20% minimum by weight
- Product type Water based

### PRODUCT SPECIFICATIONS

| PROPERTY        | TEST METHOD    | RESULTS      |
|-----------------|----------------|--------------|
| pH              | ASTM E 70-68   | 8.0-9.5      |
| Flash Point     | ASTM D 93      | N/A          |
| Viscosity cps   | ASTM E 2196    | <100         |
| % Solids/Weight | ASTM D 1353    | 20.0 minimum |
| Pounds/Gallon   | ASTM D 1475    | 8.5          |
| Kilograms/Liter | ASTM D 1475    | 1.02         |
| UV Resistance   | QUV 1000 hours | Pass         |
| Breathable      | ASTM D 1653-72 | Yes          |
| Paintable       | ASTM D 3359-90 | Yes          |
| VOC's g/L       | EPA Method 24  | 101          |



*"Enhances Natural Beauty"* **WOOD FINISHES**  
**Woodtech Solid Color Pre-Stain**  
**09-870**

**SUGGESTED USES**

**Suggested for use** over pre-primed fiber cement board, interior and exterior bare wood substrates.

**Limitations:** Not recommended for previously painted surfaces. If stain bleed occurs over bare wood, use of a stain-blocking primer will be required.

**OUTSTANDING FEATURES**

Woodtech Solid Color Pre-Stain is a durable stain that provides excellent protection without obscuring the natural beauty of the wood grain. Excellent color retention, good penetration and recoat properties. Low odor and water clean up. Suitable for application with pre-stain automated applicators.

**FINISH/SHEEN**

Eggshell

**COLORS**

Available in a variety of colors and bases. (special order)

**DRY/RECOAT TIME**

|                        |                        |
|------------------------|------------------------|
|                        | <u>50° F and above</u> |
| Dry-to-Touch           | 20-30 minutes          |
| Dry-to-Recoat          | 1-2 hours              |
| Dry-to-Stack or Bundle | 12-16 hours            |

Dry times will vary depending upon temperature, humidity and wet film thickness.

**VEHICLE**

Acrylic Latex

**SOLIDS**

By Volume: 30-32% / By Weight: 43-45%

**VOC**

62 grams per liter.

**FLASH POINT**

>200° F

**VISCOSITY**

82-86 KU

**RECOMMENDED FILM THICKNESS**

4.0-5.0 wet mils / 1.2-1.6 dry mils per coat. Application of two coats, at 320-400 sq. ft. per gallon, is recommended for most smooth or slightly textured substrates. Heavily textured or highly porous surfaces may require higher wet mils per coat.

**COVERAGE**

360 sq. ft. per gallon at recommended film thickness.

**SURFACE PREPARATION**

The surface to be painted must be clean and dry, free of dust, dirt, mildew, oil or grease. Any loose or scaling material should be removed by wire brushing or sanding. Remove mildew by scrubbing with a commercial mildew cleaner or with a solution of one tablespoon of dry powdered non-phosphate detergent and two quarts of household liquid bleach to two quarts of warm water. After scrubbing, rinse thoroughly with water and allow the surface to dry before painting. **CAUTION:** Do not add ammonia, detergents, or cleaners containing ammonia to the bleach/water mixture. Wear protective glasses and waterproof gloves to avoid eye and skin irritation. **Bare wood:** Sanding may be necessary to remove the hard, shiny surface layer (mill glaze) to improve penetration. Apply this product to a small area to confirm that water-soluble tannin stains do not penetrate through the dry film. Bare wood that has weathered without protection for extended periods will require power washing or sanding to remove loose fibers and restore surface integrity.

**THINNING**

Not recommended, but may be thinned up to 10% with water if desired.

**APPLICATION CONDITIONS**

Air, surface and material must be 40 - 90° F. Apply in shade when possible, not in direct sunlight. Do not apply if freezing temperatures or rainfall is expected within 48 hours. Mix thoroughly before and frequently during application. Apply generously up to 400 sq. ft. per gallon. Use brush, roller or spray. This stain should be used on primed fiber cement siding or unpainted wood only and is not recommended over previously painted surfaces. Apply stain uniformly to prevent lap marks. Stain to an opening in the wall or complete the entire side before proceeding to the next section. Pre mix or box all containers to insure uniformity. It is important to maintain frequent mixing during usage. Recoat within 1-2 hours.

**PRODUCT APPLICATIONS**

(X) Brush / (X) Roller / (X) Conventional Spray .055 / ( ) Dipping  
(X) Airless --Tip Size .013-.017 / HVLP .055 / Air Assisted Airless .013-.017

**CLEAN UP**

Rinse applicators and tools promptly in warm, soapy water.  
Water in spray lines should be purged from the system with mineral spirits.

**PRIMERS****SUBSTRATE**

Pre-Primed Fiber Cement  
Bare Wood  
Staining Woods

**RECOMMENDED COLUMBIA PRIMER**

Self-Priming  
Self-Priming (See notes under Surface Preparation.)  
05-200-PP Masterpiece Acry-Prime Interior/Exterior Primer

**CLEANING/  
MAINTENANCE OF  
CURED FILM**

Do not wash this coating before fourteen days to permit proper curing. May be washed after two weeks with mild liquid detergent and soft cloth or sponge, then rinse. Abrasive cleanser not recommended.

**STORAGE AND  
SHELF LIFE**

Store in a dry, well-ventilated area. Storage temperatures should be between 40° F and 90° F.  
DO NOT FREEZE. Shelf Life = 12 months.

**SPECIAL NOTES**

**All data and information is based on the non-tinted, white base formulation.**

**IMPORTANT!** Color may vary slightly from batch to batch. Check the color and "box" this product on jobsite. Color appearance may vary with texture, lighting, and sheen. Verify color **before** applying. To be sure of getting the desired color effect, make a sample brush-out on a piece of substrate to be used on the job. **STIR WELL BEFORE USING. KEEP FROM FREEZING.**

**PRECAUTIONS****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 eye watering, headaches or dizziness is experienced, increase fresh air, or wear respiratory protection (NIOSH/MSHA Approved) or leave the area. When spraying, follow spray equipment manufacturer's recommendations carefully. Wear appropriate respirator, eye protection and protective clothing.

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, get medical attention immediately.

Removal of old paint by sanding, scraping or other means could generate dust or fumes which may contain lead. Exposure to lead dust or fumes may cause 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 additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD.

**DO NOT TAKE INTERNALLY  
KEEP OUT OF REACH OF CHILDREN**

HMIS: HEALTH = 1, FIRE = 0, REACTIVITY = 0  
4 = EXTREME, 3 = HIGH, 2 = MODERATE, 1 = SLIGHT, 0 = INSIGNIFICANT, \* = CHRONIC

09-870 / 1/24/02

The data and information in this specification and technical bulletin are based on laboratory and field testing of the white base formulation, which to our knowledge is true and accurate. Because application and conditions vary, and are beyond our control, all recommendations and suggestions are made without any guarantee either expressed or implied. In the event Columbia finds that product delivered is off specification, Columbia will, at its sole discretion, either replace the product or refund the purchase price thereof, and Columbia's choice of one of these remedies shall be the buyer's sole remedy. Columbia will under no circumstances be liable for consequential damages.

  
**columbia**  
paint & coatings  
  
800-537-8530  
www.columbiapaint.com

**EPMAR****TECHNICAL BULLETIN****KEMIKO TRANSPARENT STAIN**  
*Water Extended Acrylic Urethane****Description***

**KEMIKO Transparent Stain** is a single component, superior coalescing low viscosity polymer solution formulated with quality color retentive pigments that produce an unlimited variation of color, is ultra-low VOC, has no objectional odor, very user friendly, and cures to a highly adhesive resilient transparent film. This class product is supplied in a full palette of colors and is acceptable for interior and exterior applications.

***Applications***

**KEMIKO Transparent Stain** is applied to properly prepared concrete, plaster, polymer cement, and wood as a stain, wash or faux finish. Typical applications include walkways, decks, commercial and residential floors, hospitals, schools, shopping malls, restaurants, and theme parks. This class product must be topcoated with EPMAR specified clear coats for added UV resistance, abrasion resistance, chemical resistance, and sanitary cleanliness. Excellent replacement product for high VOC alcohol stains and water based acrylic stains, which cures to a hard resilient transparent film with excellent flow properties, and increased washability.

***Performance***

**VOC – <30 g/l - Meets Final SCAQMD Rule 1113 (2008)**

**Stain Resistance (When Topcoated) – Mustard, Catsup, Soft Drinks, Coffee, Grease & Grime, Fruit Juices, Commercial Cleaners.**

**Excellent Workability – Brush, Roll, Mottling, & Spray Applications**

Manufactured by:

**EPMAR****CORPORATION****Epoxy and Polyurethane Manufacturing and Research**

13210 Barton Circle – Santa Fe Springs, California 90670

Tel: (562) 946-8781 Fax: (562) 944-9958

E-mail: [info@epmarcorp.com](mailto:info@epmarcorp.com)

### **Physical Characteristics**

|                    |                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Volume Solids:     | 15%                                                                                                                                                   |
| Weight Per Gallon: | 8.5 lbs.                                                                                                                                              |
| Packaging:         | 1s, 5 <sup>s</sup> , 55 <sup>s</sup>                                                                                                                  |
| FlashPoint:        | >200°F.                                                                                                                                               |
| Colors:            | Phthalo Blue, Bright Yellow, Yellow Oxide, Monoazo Red, Red Oxide, Orange, Phthalo Green, Raw Umber, Raw Sienna, Burnt Umber, Burnt Sienna & Violet.  |
| Dry Time:          | @70°F. 50% RH, 30-minutes – 1 hour to touch<br>2-3 hours to Clear Coat.<br>Full cure in 48-hours (washability)                                        |
| Coverage:          | 300-400 square feet per gallon – per coat                                                                                                             |
| Thinning:          | None required. Use mild soap and tap water for cleanup                                                                                                |
| Primers:           | None Required. Typically used as a transparent stain on bare cement/plaster, polymer cement, and wood                                                 |
| Topcoats:          | Kemiko Clear Acrylic Urethane, Sta-Crete 2700 Clear Polyurethane, Sta-Crete 3700 Clear Epoxy. Refer to systems for complete application instructions. |

### **Surface Preparation**

**Concrete, Plaster, Polymer Cements** – Remove all visible oil, grease, sludge, and any other contaminants shall be removed prior to any abrasive surface preparation, acid etching and water washing. Surface shall be cured, dry and free from dark alkali stain and laitance. Blas-Trac or other abrasive preparation is preferred for long term adhesion and non-slip surface.

**Wood** – Surface must be completely dry, free of any contaminants, mildew and organic matter.

### **Application Methods**

**Brush** – Use top-quality nylon bristle brush for best film properties.

**Mottling** – Use clean cloths or sponges for faux finishing, aging and graining.

**Roller** – Lambswool or similar cover with phenolic core, ¼ - ½ inch nap thickness.

**Spray** – Commercial conventional air spray or airless spray equipment utilizing spray gun tip size between .013”-.015”. Adjust pressure for proper atomization. Hudson and other hand held commercial sprayers could be used to achieve desired results.

**Environment** – Apply between 50°F. – 100°F. and 5°F. above dewpoint.

**Safety** – Areas such as pool decks, sloped driveways, or other surfaces subjected to water may become slippery when topcoated with specified products. If you must seal these surfaces, keep the sealer film build-up to a minimum. In severe cases a non-slip material such as fine glass beads, washed silica sand and other aggregates may be broadcasted between coating applications.

**Contact EPMAR for any additional application information.**

### **WARRANTY**

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

**FUHR**  
International, LLC  
Specialty Paint &  
Wood Coatings

High Quality Water based  
Wood Finishes

**BEST GRADE**

Product Series Number:  
**105**

## Wiping Stain

Summer 2002

An extremely low Voc water based stain designed for wood color enhancement and decorative effects before sealing and finishing. Used on any wood surface, 105 is a little to no grain raising acrylic stain base developed to work with all of our series of sealers and finishes as well as most other finish products including lacquer and other solvent based finishes. Compatible with pigments and dyes for an unlimited range of colors. Offered in 18 standard stock colors of both pigment (good for evening out unmatched woods) and dye (best available clarity and warm colors) with custom colors matched upon request. Designed for use when more open time and workability is needed in wiping applications. 105 may be spray applied then wiped from the surface, brushed or simply wiped on. Typical dry time to seal in ambient conditions is 30-45 minutes depending on substrate preparation and amount of stain applied. Product may be force dried with heat and air if proper flash time is allowed

### PRODUCT DATA & SPECIFICATIONS

|                               |                         |                              |                             |
|-------------------------------|-------------------------|------------------------------|-----------------------------|
| <b>Appearance &amp; Odor:</b> | Color liquid, mild odor | <b>VOC content by #:</b>     | .125#/gallon                |
| <b>Evaporation Rate:</b>      | Slower than ether       | <b>VOC content by G/l:</b>   | 15 Grams / liter            |
| <b>Solubility in Water:</b>   | Dilutable               | <b>VHAP content:</b>         | 0                           |
| <b>Specific Gravity:</b>      | < 1.00                  | <b>VOC % Solids content:</b> | .004# /solids/gallon        |
| <b>Weight per Gallon:</b>     | 8.3 #                   | <b>Flash Point:</b>          | Non-combustible             |
| <b>Solids by Weight:</b>      | 1.42 #                  | <b>Flammability:</b>         | Not applicable              |
| <b>Solids by Volume:</b>      | 17.1 %                  | <b>Viscosity:</b>            | # 4 Zahn Cup, 25-30 seconds |

**Substrate Preparation:** Substrate should be pre-sanded with 150 grit abrasive or higher. 220 grit abrasive is recommended for best results. Clean surface of all dust with lint free cloth.

**Application:** May be applied by spray, brush or wiping. Allow 45 minutes in ambient conditions for drying prior to sealer application.

**Cleanup:** Flush all equipment with water both before and after use of 105. Build-up may be removed with a cleaner solution such as 330 Universal Cleaner & Stripper. Flushing with water is necessary after the use of any cleaning agent to avoid contamination

### Featured Benefits

\* Fast Dry \* Extremely Low VOC \* Multi-Use \* Low Cost \* 36 Standard Colors \*  
\* Film Forming \* Water Clean-Up \* No Haps \* Non-Flammable \* Easy Application \*

**1-800-558-7437**

Fuhr International, LLC  
64664 Woodburn Drive  
Winigan, MO 63566

**www.fuhrinternational.com**



**FUHR**International, LLC  
Specialty Paint &  
Wood FinishesHigh Quality Water-based  
Wood Finishes

Product Number: 5800

# ZVOC® EXTERIOR WATERBASED STAIN

Summer 2002

A SOLVENT FREE water based acrylic stain for use on interior & exterior wood substrates. Of the many unique traits this product has to offer, excellent substrate wetting and color control, overall durability, chemical resistance along with water resistance are excellent. Minimal grain raise. The exterior durability allows this product to be used in numerous applications from doors to windows. This product also is designed for the kitchen cabinet industry when used with our ZVOC Finishes. This a great stain for many applications outside the cabinet industry, including but not limited to furniture, molding, passage doors, millwork, wine racks and decks. Typical dry time to touch in ambient conditions is 5 minutes, light handling in 10 minutes and sealer coat in 20 minutes. Sanding between coats of sealer and topcoat with 320 grit (or higher) sandpaper is recommended for maximum quality. Compatible with most finish equipment and normal stain applications to include wiping, dipping, spray and wipe or spray only.

## PRODUCT DATA & SPECIFICATIONS

|                               |                         |                              |                             |
|-------------------------------|-------------------------|------------------------------|-----------------------------|
| <b>Appearance &amp; Odor:</b> | White liquid, mild odor | <b>VOC content by #:</b>     | 0 #/gallon                  |
| <b>Evaporation Rate:</b>      | Slower than ether       | <b>VOC content by G/l:</b>   | 0 Grams / liter             |
| <b>Solubility in Water:</b>   | Complete                | <b>VHAP content:</b>         | 0                           |
| <b>Specific Gravity:</b>      | < 1.01                  | <b>VOC % Solids content:</b> | 0 # /solids/gallon          |
| <b>Weight per Gallon:</b>     | 8.44#                   | <b>Flash Point:</b>          | Non-combustible             |
| <b>Solids by Weight:</b>      | 15.3 %                  | <b>Flammability:</b>         | Not applicable              |
| <b>Solids by Volume:</b>      | 14.3 %                  | <b>Viscosity:</b>            | # 2 Zahn Cup, 20—35 seconds |

**Substrate Preparation:** Substrate should be pre-sanded with 150 grit abrasive or higher. 220 grit abrasive is recommended for best results. Clean surface of all dust with lint free cloth.

**Application:** May be applied by spray, dipping, roll coating or brushing. Allow 15 minutes in ambient conditions for drying prior to sealer application.

**Cleanup:** Flush all equipment with water both before and after use of 5800. Build-up may be removed with a cleaner solution such as 330 Universal Cleaner & Stripper. Flushing with water is necessary after the use of any cleaning agent to avoid contamination.

## Featured Benefits

\* Fast Dry \* Zero VOC \* Excellent Durability \*  
\* Water Clean-Up \* No Haps \* Easy Application \* Meets KCMA \*

1-800-558-7437

Fuhr International, LLC  
64664 Woodburn Drive  
Winigan, MO 63566[www.fuhrinternational.com](http://www.fuhrinternational.com)



## PRODUCT DESCRIPTION

ACRYLASTIC 490 was developed in 1983 to be a high-build, decorative, extremely flexible, high performance waterborne waterproof wall coating that provides long-term protection and beauty over a variety of interior and exterior surfaces.

## PRODUCT USES

ACRYLASTIC 490 is designed to coat over properly primed interior and exterior concrete, masonry, stucco, most wood and metal substrates. Acrylastic 490 may be top coated with Sunshield 3800 to reduce dirt pick-up. It is especially recommended for use over:

- ☒ Cracked, uneven or unsightly surfaces
- ☒ Surfaces where water penetration and degradation pose problems
- ☒ As an encapsulator coating over asbestos and lead
- ☒ Areas where long-term surface protection is desired and continuous repainting costs are prohibitive

## PRODUCT ADVANTAGES

- ☒ Superior Performance = Superior Value & Life-Cycle Cost
  - ☒ Acrylastic 490 offers double the performance of competitors
  - ☒ 1 gallon will do what 2 gallons of most other elastomers do
- ☒ Superior flexibility and elongation at 1400%
  - ☒ Most other elastomers hit 500%
  - ☒ Greater protection against new cracks forming
  - ☒ Remains very flexible even at low temperatures
- ☒ Extremely tough, has highest tensile strength in its class at 2400 p.s.i.
  - ☒ Most other elastomers hit only 250 p.s.i.
  - ☒ Better resistance to dirt pick-up and tearing
- ☒ Superior Resistance to Alkali, Salt and Fungus and Weathering
- ☒ Superior adhesion to substrate
  - ☒ Resists peeling off
- ☒ Superior waterproofing, has very low water vapor transmission
  - ☒ Won't allow water in liquid form to pass, yet it will breath
- ☒ Easy application with airless, conventional air, roller or brush
- ☒ Water-base for easy clean-up and low odor
- ☒ High solids therefore low shrinkage, allows it to bridge hair-line cracks

# ACRYLASTIC®

## 490

### PRODUCT DATA

## PRODUCT PROPERTIES

- ☒ Tensile strength, p.s.i. .... 2400  
(ASTM D2370, 1 in./min.)
- ☒ Tensile elongation % at break ..... 1400  
(ASTM D2370, 1 in./min.)
- ☒ Low Temperature tensile elongation(0 °C)% ..... 600  
(ASTM D2370, 1 in./min.)
- ☒ Moisture vapor transmission, perms ..... 1.2  
@ 20 mils DFT (ASTM E96, Proc. B)
- ☒ Peel Adhesion, concrete p.s.i. .... 48  
(ASTM D413)
- ☒ Viscosity (Stormer K.U.) ..... 125-135  
(ASTM D562)
- ☒ Solids, % minimum by volume ..... 60  
(by application)
- ☒ Impact resistance ..... > 60 in-lb  
(Fed. Std. 141 [6226])
- ☒ Salt-spray resistance ..... no rusting  
(ASTM D1654)
- ☒ Alkali resistance ..... no effect  
(Fed. Spec TT-C-555B, GSA ex. 1)
- ☒ Fungus resistance ..... no growth  
(Fed. Std. 141 [6271], note 2)
- ☒ Heat Stability ..... no change  
(Fed. Std. 141 [6051])
- ☒ Resistance to wind-driven rain > 1000 mph ..... no wt. gain  
(Fed. Spec TT-C-555B, 4.4.7 min. 95 mph req.)
- ☒ Resistance to ponded water ..... no film degradation
- ☒ Accelerated weathering @ 5000 hrs. .... no chalking, no sheen loss  
(ASTM D822) no degradation, no discoloration

**Note:** All tests performed represent minimum standards. Unless otherwise stated and specified, all samples were spray applied, allowed to air dry for 1 year and tested at 23 °C (73 °F).

## PRODUCT LIMITATIONS

- ☒ Do not apply Acrylastic 490 when surface temperature is below 45 °F.
- ☒ When surface or air temperature exceeds 100 °F, consult Davlin for special application procedures
- ☒ Do not apply during, or 24 hours preceding, inclement weather including rain, fog, mist or freezing temperatures.
- ☒ Do not apply directly to contaminated, damaged or powdery surfaces.
- ☒ Do not apply to any surface previously coated with a silicone water repellent or other type of release or curing agent.
- ☒ Do not apply when a vapor barrier is required.
- ☒ Do not apply on exterior below-grade surfaces.
- ☒ Acrylastic 490 will freeze and become unstable at temperatures below 32 °F. Do not ship or store in any area where freezing may occur.

# WATERBORNE ELASTOMERIC WALL COATING

## PRODUCT INFORMATION

|                                          |                                      |
|------------------------------------------|--------------------------------------|
| Finish .....                             | Eggshell                             |
| Color .....                              | White or Custom Colors               |
| Components .....                         | 1                                    |
| Curing Mechanism .....                   | Air Dry                              |
| Volume Solids (% as applied) .....       | 60                                   |
| Coats .....                              | 1-2                                  |
| Wet Film Thickness per coat* .....       | 16 mils                              |
| Dry Film Thickness (DFT) per coat .....  | 9.6 mils                             |
| Coverage per coat per 100 sq. ft. ....   | 1 gallon                             |
| Minimum total DFT (5 year system) .....  | 8 mils                               |
| Minimum total DFT (10 year system) ..... | 16 mils                              |
| VOC .....                                | 75 g/l                               |
| Flash Point (SETA) .....                 | >215°F                               |
| Qualifications .....                     | Fed. Spec. TT-C-555                  |
| Packaging .....                          | 1, 5, 55 Gal.                        |
| Availability .....                       | Shipped Nationally & Internationally |

## APPLICATION SYSTEM

|                           |                       |
|---------------------------|-----------------------|
| Primer/Sealer .....       | <i>Butylseal 572</i>  |
| Base Coat .....           | <i>Acrylastic 490</i> |
| Top Coat (optional) ..... | <i>Sunshield 3800</i> |

## APPLICATION CONDITIONS

- Temperature air and surface: ..... 45° - 100°F, 7° - 38°C
- Do not apply at temperatures below 45°F nor during, or 24 hours preceding, inclement weather: including rain, fog, mist, or freezing temperatures.

## SURFACE PREPARATION

- All surfaces shall be clean, free from dirt, release agents, wax, mildew and all other contaminants, including salt deposits. Remove all old loose paint.
- All porous surfaces shall first be primed with Davlin's Butylseal 572 including: new wood, concrete, masonry and slightly chalky substrates. Metal surfaces shall first be primed with a suitable metal primer. Old wood surfaces shall be primed with an oil base primer.
- CRACKS:** Prime all cracks with Butylseal 572. For cracks 1/32 inch or less apply Acrylastic 490 and roll in. On larger cracks not exceeding 3/8 inch, fill with Acryflex 1210. On cracks exceeding 3/8 inch, treat as expansion joint using a polyurethane foam backer rod and an expansion joint compound or repair with a masonry patching compound.
- Never feather out caulk. Remove all excess caulking material from around the crack to avoid an uneven appearance after applying Acrylastic 490. Acrylastic 490 will not prevent the appearance or reappearance of cracks due to structural movement at expansion joints, settling or earthquakes.

## APPLICATION EQUIPMENT

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.

**Airless:** Standard equipment such as Graco Bulldog Hydra Spray 30 or 45:1 pump with a 0.025 - 0.031 inch fluid tip.

**Conventional:** Industrial equipment such as Binks 11:1 Saturn pump or equivalent with air control cut-off, a material hose 3/4 inch ID minimum and an air hose 1/2 inch ID and 50-75 p.s.i. air pressure minimum. Heavy mastic spray gun such as Binks 7E2 with 1/4 inch fluid tip or larger and slotted nozzle.

**Brush or Roller:** Suitable for waterborne coating. Multiple coats may be required to achieve specified DFT. Roller nap will vary according to texture of substrate.

## APPLICATION PROCEDURE

- Flush all equipment with water before use.
- Stir Acrylastic 490 thoroughly until uniformly blended. Avoid excessive mixing to prevent air entrapment.
- Do not thin.
- Spray or roll a wet coat in even, parallel passes. Overlap each pass 50 percent to avoid holidays, bare areas and pinholes. If required, follow with a cross roll or spray at right angles to first pass. Use a wet film gauge to check film thickness.
- Drying time to re-coat @70°F (21°C)  
 minimum ..... dry through (4 - 8 hours)  
 maximum ..... none
- On rough surfaces back roll first coat to ensure that coating is pushed deep into surface. Spray or roll second coat at right angle to first.
- Allow second coat to dry 24 hours and no more than 7 days before testing for dry film thickness by removing samples of the coating for micrometer thickness measurements. Examine and inspect applied coating for pinholing and air entrapment. Repair damaged areas.
- Clean equipment with water or water and detergent immediately after use.

## WARRANTY INFORMATION

- Limited warranties are available subject to certain terms and restrictions contact your Davlin representative at (510)848-2863 for warranty information.
- \* Acrylastic 490 may be applied at higher wet film thicknesses under appropriate conditions. Consult Davlin before doing so.

The information, ratings and opinions stated above are, to the best of our knowledge, accurate, representing the results of laboratory and field evaluation. It is presented in good faith to assist the user in determining whether our products are suitable for his application. Since the user's application and other requirements are not known by us or are beyond our control, no warranty or guarantee as to results is hereby made or implied by Davlin Coatings, Inc.

## DAVLIN COATINGS, Inc.

700 Allston Way - PO Box 2308  
 Berkeley, CA 94702  
 (510)848-2863 Fax: (510)848-1464



# SPECIFICATIONS

07140,09960

ELASTOMERIC WALL COATING

TYPE WALL SURFACE: CONCRETE, MASONRY, STUCCO

TYPE PRODUCTS: ACRYLASTIC 490

## PART 1: GENERAL

### 1.01 Work Included

- A. Work includes application of Davlin Coatings' Acrylastic Elastomeric Wall Coating System over existing concrete, masonry or stucco surface.
- B. All parts of the "Wall Specifications" or "General Requirements" and the manufacturer's installation details are pertinent to this specification.

### 1.02 Work Not Included

- A. Any modification to building design or wall mounted equipment and/or accessories not found to be part of this specification.

### 1.03 System Description

- A. A waterborne system comprised of a primer/sealer (Butylseal 572), a high-performance single-component elastomeric coating (Acrylastic 490) and a 100% Acrylic top coat (Sunshield 3800).

### 1.04 References

- A. American Society for Testing and Materials (ASTM)

### 1.05 Submittals

- A. Contractor shall furnish the following documents with bid:
  - 1. Proposed start date, number of working days, and schedule of planned process across building.
  - 2. Manufacturer's installation instructions.

### 1.06 Delivery, Storage, and Handling of Materials

- A. Delivery of materials to the work site in unopened packages bearing the manufacturer's labels.
- B. All materials shall be stored off ground in dry areas which will protect the materials from freezing. Store all materials at room temperature to assure proper application.

### 1.07 Project Conditions/ Davlin Products

- A. Do not apply over water-saturated surfaces.
- B. Do not apply over surfaces contaminated with materials which can act as release agents.
- C. Do not apply during, or 24 hours preceding, inclement weather including rain, fog, mist, dew, or freezing temperatures.
- D. Do not apply when surface or air temperature is below 45° F.
- E. When surface or air temperature exceeds 110° F. consult Davlin for special application instructions.
- F. Do not apply over old coating which is or may become loose.
- G. Do not apply over surface which contains bacteria, mold or mildew.

### 1.08 Safety / Coordination

- A. All application, material handling and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
- B. Davlin's Material Safety Data Sheets (MSDS) shall be read, understood and instructions adhered to.

## PART 2: PRODUCTS

### 2.01 Manufacturer

- A. Product manufactured or accepted by Davlin Coatings, Inc.

### 2.02 Materials

- A. Primer/Sealer: Davlin Coatings Butylseal 572
- B. Elastomeric Coating: Davlin Coatings Acrylastic 490
  - 1. ASTM D2370 Tensile Strength p.s.i.: ..... 2400
  - 2. ASTM D2370 Tensile Elongation, % at break: ..... 1400
  - 3. ASTM E96 Procedure B, Moisture Transmission - perms: ..... 1.2
- C. Top Coat: Davlin Coatings Sunshield 3800
- D. Caulking: Davlin Coatings Acryflex 1210



## **PART 31 EXECUTION**

### **3.01 Preparation**

- A. All concrete or masonry surfaces shall be clean, free from dirt, release agents, wax, mildew and all other foreign substances. Remove contaminants mechanically or by power washing.
- B. Any current coating lacking excellent adhesion to existing substrate shall be removed.
- C. Any metal surfaces that are not galvanized shall be primed with a suitable metal primer.
- D. Applicator shall protect all property during preparation.
- E. Applicator shall clean up all residues resulting from preparatory work.

### **3.02 Application**

- A. Prime Coat.
  - 1. Apply Butylseal 572 as the prime coat over all areas to be coated at the approximate rate of 100-300 square feet per gallon. Coverage rate will vary depending on surface irregularities and porosity. Apply liberally to the existing wall coating at the saturation rate.
  - 2. Use caution when applying Butylseal 572 so as to avoid contact with surfaces not to be coated including windows, caulking, walkways, etc.
  - 3. Allow to dry before applying first coat of Acrylastic 490. At ambient temperatures this should take 4-8 hours. At temperatures significantly lower and/or when humidity is much above 60% allow a longer time. If in doubt, allow Butylseal 572 to dry overnight.
  - 4. Dry time is defined as that amount of time required for the coating to form a film to such a degree that when one's thumb is pressed firmly to the coating, none of the coating will adhere to the thumb.
- B. Cracks
  - 1. Prime all cracks with Butylseal 572. For cracks 1/32 inch or less apply Acrylastic 490 and roll in. On larger cracks not exceeding 3/8 inch, fill with Acryflex 1210. On cracks exceeding 3/8 inch, treat as expansion joint using a polyurethane foam backer rod and an expansion joint compound or repair with a masonry patching compound. Allow to dry.
  - 2. For structural cracks and expansion joints consult Davlin.
- C. Acrylastic 490
  - 1. For a 5 or 10 year system, apply the first coat of Acrylastic 490 at the approximate rate of 100 square feet per gallon to all areas (16 wet mils). Use a wet film gauge to check mil thickness periodically. Allow to dry. Dry film thickness should be no less than 8 mils.
  - 2. For 10 year system apply a second coat of Acrylastic 490 perpendicular to the first at the approximate rate of 100 square feet per gallon (16 wet mils) over all areas to be coated. Use a wet film gauge to check mil thickness periodically. The total DFT of both coats should be no less than 16 mils.. Allow a minimum of 24 hours for this second coat of Acrylastic 490 to dry before applying the Sunshield 3800.
  - 3. Acrylastic 490 is supplied as a single-component coating. Mix cans thoroughly as needed until homogeneous. Avoid excessive agitation to prevent air entrapment and resultant pinholing in film.
  - 4. Acrylastic 490 is supplied as ready-mixed. Do not reduce with water or solvents.
  - 5. Use caution when applying Acrylastic 490 so as to avoid contact with surfaces not to be coated such as windows, sealants and walkways.
- D. Sunshield 3800.
  - 1. Apply Sunshield 3800 as the topcoat evenly at a rate of between 250 to 300 square feet per gallon in one coat. Provide a minimum DFT of 2 mils.

### **3.02 Inspection/Quality Control**

- A. Certification. The applicator, upon completion of the job, and prior to issuing a warranty by Davlin, shall complete the "Warranty Application" certifying to both building owner representative and Davlin Coatings, Inc. that the Acrylastic 490 coating system (exclusive of Sunshield 3800) has been applied to all surfaces at a minimum combined dry film thickness of 8 mils for a 5 year system or 16 mils for a 10 year system.
- B. Upon completion of job, all equipment, tools, coatings, etc. shall be removed from job site. All spillages shall be removed, all broken property repaired, all disconnected property reconnected.

### **3.04 Cleaning**

- A. Remove trash and debris. Repair damage. Remove stains from walls and walkways caused by work of this section.

**END OF SECTION**

**DAVLIN Coatings, Inc.**

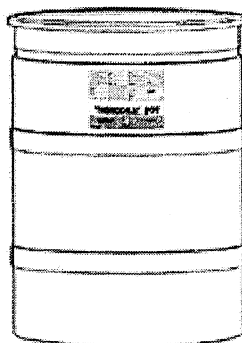
700 Allston Way - PO Box 2308 - Berkeley, CA 94702

[INDEX](#) [FEEDBACK](#) [HOME](#)[ABOUT THORO](#)[PRODUCT SPECIFIER](#)[NEWS](#)[MESSAGE CENTER](#)

## PRODUCT SPECIFIER

Make a selection from one of the menus and click "GO":

|           |                        |
|-----------|------------------------|
| <b>GO</b> | Select CSI Format...   |
| <b>GO</b> | Select Application...  |
| <b>GO</b> | Select Product Name... |



## Thorocoat® DOT

A water-based high-build 100%-fine-textured acrylic coating specially designed for US DOT applications. Apply it vertically and overhead to new or aged concrete as well as previously coated surfaces. Thorocoat® DOT resists wind-driven rain, weathering, and freeze-thaw damage. It provides a durable finish, which resists abrasion and impact. Thorocoat® DOT comes in DOT custom-made colors and in 30-gallon drums only. It is VOC compliant.

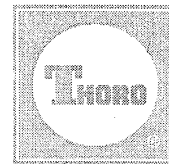
[Technical Data Guide \(PDF/74.6k\)](#)

[Material Safety Data Sheet \(PDF/18.6k\)](#)

[Guide Specification \(DOC/52.7k\)](#)

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ChemRex®

**degussa.**  
Construction Chemicals



# THOROcoat® DOT

**Water-based high-build 100% acrylic fine-textured coating**

## Advantages

- Resists wind-driven rain
- Water vapor permeable
- Excellent hiding power
- Resistant to weathering
- Suitable for marine environment
- Resistant to erosion and impact
- Freeze-thaw resistant
- State DOT custom-made colors
- Recoatable
- VOC compliant
- Environmentally friendly

## Where to Use Thorocoat® DOT

- DOT concrete structures
- Exterior concrete surfaces
- Vertical and overhead surfaces
- Previously coated surfaces

## How to Apply Thorocoat® DOT

### Surface Preparation

All surfaces must be sound, clean, and free of all dust, dirt, oils, grease, laitance, efflorescence, mildew, fungus or any biological residues or chemical contaminants that may prevent good adhesion.

Clean the surface by using high-pressure waterblasting, with or without abrasives added to the water stream. The surface should have a texture similar to 100 grit sandpaper when completed.

Some stains and surface contaminants may require chemical removal. When chemical cleaners are used, be sure to neutralize the compounds and fully rinse the surface with clean water. Allow surface to dry before proceeding.

Adhesion should be verified by a test area, if in question. See "For Best Performance" section.

### Precast or Cast-In-Place Concrete

New concrete must be cured a minimum of 28 days prior to application of Thorocoat® DOT. In addition to laitance and contaminants, all form release agents or previously applied sealers must also be removed.

Remove all form tie wires and patch holes, small voids and spalls using the appropriate Thoro® concrete repair product. All water ingress into concrete structures should be eliminated before application begins. Check and repair joints or other defects.

Very slick, dense concrete surfaces should be abrasive blasted or primed with Thoro® Primer 2K. To check for proper adhesion, a test area is recommended. See "For Best Performance" section.

### Existing Acrylic Coatings

Existing acrylic paint films should be completely cleaned and have all blisters, loose or delaminated areas removed.

Sand or grind the edges of the remaining coating to ensure adhesion and a smooth transition to the new material. Sand the edges of the area to featheredge. Wash down and allow to completely dry.

To check for proper adhesion, a test area is recommended. See "For Best Performance" section.

### Chalky surfaces

All chalky surfaces should be treated with Thoro® Primer 2K.

According to ASTM D 4214, Test Method A, a surface is considered chalky if a black cloth, which has been rubbed on the cleaned surface, has a visible residue on it greater than #8. Apply Thoro® Primer 2K if chalk residue rates #6 after water cleaning.

### Cracks

Locate and identify all cracks in order to clean, detail and fill them.

For cracks larger than 1/32" (0.8 mm) and up to 1/16" (1.6 mm), use the acrylic-filling Thorolastic® Brush Grade.

For cracks larger than 1/16" by 1/16" (1.6 mm by 1.6 mm) but less than 1/4 " by 1/4 " (6 mm by 6 mm), use the acrylic-filling Thorolastic® Knife Grade.

If using a product other than Thorolastic® Knife Grade or Brush Grade, always apply a test application in a low visibility area to ensure compatibility with patching products.

Cracks larger than 1/4 " by 1/4 " (6 mm by 6 mm) should be treated as standard sealant joints following reputable sealant manufacturer's instructions. Contact ChemRex® Technical Service for recommendations.

### Mixing

Mix Thorocoat® DOT at low speed to ensure color uniformity and aggregate disbursement, and minimize air entrapped. Do not thin.

### Application

Thorocoat® DOT is designed as a high-build coating. Proper uniform wet film thickness (WFT) must be maintained during application to ensure the performance characteristics desired (see "Coverage" section).

Always work to a wet edge with a 50% overlap. Try to work to a natural break before stopping the application. Keep application methods consistent throughout. Inconsistent application techniques will produce texture and color variations.

Maintain uniform coverage of 14 - 20 mils wet film thickness (WFT) per coat. Avoid heavy applications at 24 to 28 mils wet film thickness (WFT) in one coat, which could cause mud cracking, or color variations.

### Brush

Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups. Use a nylon brush only.

### Roller

Use a 1/2" (13 mm) nap roller cover (lamb's wool is preferred). Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll. Keep application strokes uniformly vertical or horizontal to ensure color uniformity.

### Spray application

Use a heavy duty sprayer designed for the application of coatings which contain sand particles. Ideal tip size is 1/4" to 5/16" with a gun pressure between 30 and 40 psi (0.21 - 0.28 MPa).

### Clean up

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

### Dry time

At 70°F (21°C) and 50% relative humidity. To touch, 1 to 2 hours. To recoat, 2 to 4 hours. To full cure, 8 hours. Lower surface or air temperature and higher relative humidity can extend dry time.

### For Best Performance

- Do not apply when the temperature (substrate or ambient) is 40°F (4°C) or below, or is expected to fall below 40°F (4°C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Do not apply to frozen or frost-covered substrates.
- Not for immersion service.
- Do not apply to horizontal traffic-bearing surfaces.
- Do not apply over moving cracks, for crack filling or crack bridging.
- Do not apply to existing coatings that are not compatible. Perform appropriate adhesion test.
- Apply a 4-ft. by 4-ft. (1.2 m by 1.2 m) test area to verify acceptable color, texture, and adhesion before proceeding with any project. Verify adhesion according to ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 to 5 scale, a minimum adhesion rating of 4A is required.
- Do not use solvents, thinners or water to reduce the material
- Transport and store in a dry place away from direct sunlight until ready for use. Keep from freezing temperatures.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.



## Technical Data

| Liquid Property             | Test Method | Result    |
|-----------------------------|-------------|-----------|
| Weight/gallon, lbs.         | ASTM D 1475 | 13.6      |
| Solids by weight, %         | ASTM D 5201 | 68.7      |
| Solids by volume, %         | ASTM D 5201 | 49.1      |
| Viscosity, KU               | ASTM D 562  | 117 - 125 |
| VOC content, g/L (lbs./gal) | ASTM D 3960 | 58 (0.48) |

| Performance Property           | Test Method                  | Result             |
|--------------------------------|------------------------------|--------------------|
| Accelerated weathering         | ASTM G 23, Type D            | 5,000 hrs., passes |
| Wind-driven rain               | TT-C-555B                    | Passes             |
| Water vapor permeance          | ASTM D 1653                  | 13 perms           |
| Salt spray resistance          | ASTM B 117                   | Passed 300 hours   |
| Adhesion to mineral substrates | ASTM D 3359                  | Passes             |
| Flexibility                    | FL DOT Section 400-15.2.6.7g | Passes 1" mandrel  |
| Abrasion resistance            | FTMS 141a, Method 6191       | Passed at 3,000+   |
| Impact resistance              | FTMS 141a, Method 6191       | Passed 2.7 m/m     |
| Freeze-thaw resistance         | FL DOT Section 400-15.2.6.7a | Passed 50 cycles   |
| Fungus growth resistance       | TT-P-29g                     | Passes             |
| Thermal cycling                | ICBO Method modified         | Passed 20 cycles   |

All application and performance values are typical for the material applied in two coats at 16 mils total DFT. Performance values may differ due to variations in the test method, conditions and configurations.

## Order Information

### Packaging

Thorocoat® DOT

- 5 gallon (18.9 L) pail
- 30 gallon (114 L) drums

### Shelf Life

Up to 12 months in unopened, undamaged original sealed containers, which have been properly transported and stored.

### Colors

Thorocoat® DOT is available in DOT States required colors.

For further information, please consult your local Thoro® distributor or representative.

### Texture

- Fine

### Coverage

ChemRex® always recommends applying a test area to determine actual coverage. Apply in an unstretched, uniform manner.

For estimating purposes, Thorocoat® DOT covers between 60 to 80 sq. ft./gal. (1.5 to 2.0 m<sup>2</sup>/L) per coat when applied on porous substrates and between 80 to 100 sq. ft./gallon (2.0 to 2.5 m<sup>2</sup>/L) per coat when applied on dense substrates.

## Caution

Thorocoat® DOT contains calcium carbonate, titanium dioxide, mica, ethylene glycol, crystalline silica

## Risks

May cause skin, eye or respiratory irritation. Ingestion may cause irritation. Repeated ingestion may cause kidney damage.

## Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. DO NOT take internally. Wash thoroughly after handling. Keep container closed when not in use. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations. Keep container closed when not in use. All label warnings must be observed until container is commercially cleaned or reconditioned.

## First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. If inhalation causes physical discomfort, remove to fresh air. If difficulty persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

For more information see Material Safety Data Sheet (MSDS) for this product.

## Proposition 65

This product contains material listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

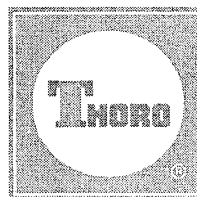
## VOC Content

58 g/L or 0.48 lbs/gal, less water and exempt solvents.

*For medical emergencies only, call ChemTrec (1/800/424-9300).*

### Limited Warranty Notice

Every reasonable effort is made to apply ChemRex® exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, CHEMREX® MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and CHEMREX® shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the ChemRex® Technical Manager.



**ChemRex®**

Corporate Office:

889 Valley Park Drive; Shakopee, MN 55379

Customer Service: 1/800/433-9517

Technical Services: 1/800/ChemRex (1/800/243-6739)

Web Site: [www.chemrex.com](http://www.chemrex.com)

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : THOROCOAT DOT  
 IDENTIFICATION NUMBER: F-060-100  
 PRODUCT USE/CLASS : Coating

DATE PRINTED: 03/06/00

SUPPLIER:

MANUFACTURER:  
 ChemRex Inc.  
 Commercial Construction  
 Products Division  
 889 Valley Park Drive  
 Shakopee, MN 55379

EMERGENCY TELEPHONE:

EMERGENCY TELEPHONE: (800) 424-9300  
 24 HRS A DAY 7 DAYS A WEEK

PREPARER: Scott Shinn, PHONE: 612-496-6000, PREPARE DATE: 03/06/00

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

| ITEM | CHEMICAL NAME     | CAS NUMBER | WT/WT %<br>LESS THAN |
|------|-------------------|------------|----------------------|
| 01   | ethylene glycol   | 107-21-1   | 5.0 %                |
| 02   | mica              | 12001-26-2 | 5.0 %                |
| 03   | titanium dioxide  | 13463-67-7 | 10.0 %               |
| 04   | Silica, quartz    | 14808-60-7 | 25.0 %               |
| 05   | Calcium carbonate | 471-34-1   | 35.0 %               |

| ----- EXPOSURE LIMITS ----- |          |            |          |             |         |      |
|-----------------------------|----------|------------|----------|-------------|---------|------|
|                             | ACGIH    |            | OSHA     |             | COMPANY |      |
| ITEM                        | TLV-TWA  | TLV-STEL   | PEL-TWA  | PEL-CEILING | TLV-TWA | SKIN |
| 01                          | N.E.     | 127 mg/m3* | N.E.     | 125 mg/m3   |         | NO   |
| 02                          | 3 mg/m3  | N.E.       | 3 mg/m3  | N.E.        | N.E.    | NO   |
| 03                          | 10 mg/m3 | N.E.       | 15 mg/m3 | N.E.        | N.E.    | NO   |
| 04                          | .1 mg/m3 | N.E.       | .1 mg/m3 | N.E.        | N.E.    | NO   |
| 05                          | 10 mg/m3 | N.E.       | 15 mg/m3 | N.E.        | N.E.    | NO   |

(See Section 16 for abbreviation legend), \* - Ceiling Value

## SECTION 3 - HAZARDOUS IDENTIFICATION

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, but will not permanently injure eye tissue.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated contact can

(Continued on Page 2)

|                                    |
|------------------------------------|
| SECTION 3 - HAZARDS IDENTIFICATION |
|------------------------------------|

result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). May cause irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate and cyanosis may result from over-exposure to vapor. May cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Moderately toxic.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Chronic overexposure may cause kidney damage. This product contains silicon dioxide [quartz] which has been listed as a suspected human carcinogen by NTP and IARC.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT INHALATION INGESTION EYE CONTACT

|                                |
|--------------------------------|
| SECTION 4 - FIRST AID MEASURES |
|--------------------------------|

FIRST AID - EYE CONTACT: Flush eye with water for 15 minutes. Get medical attention.

FIRST AID - SKIN CONTACT: Remove contaminated clothing and shoes. Wash affected area(s) thoroughly with soap and water. If irritation persists, seek medical attention.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, DO NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Should vomiting occur, be sure to keep victim's head below hips to avoid aspiration of vomitus into lungs.

|                                    |
|------------------------------------|
| SECTION 5 - FIRE FIGHTING MEASURES |
|------------------------------------|

FLASH POINT: 232 F

LOWER EXPLOSIVE LIMIT: 3.2 %

UPPER EXPLOSIVE LIMIT: 15.3 %

AUTOIGNITION TEMPERATURE: N.D.

EXTINGUISHING MEDIA: ALCOHOL FOAM CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Solid stream of water or foam may cause frothing.

SPECIAL FIREFIGHTING PROCEDURES: Containers exposed to fire should be kept cool with water spray. Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus

(Continued on Page 3)

|                                    |
|------------------------------------|
| SECTION 5 - FIRE FIGHTING MEASURES |
|------------------------------------|

pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

|                                         |
|-----------------------------------------|
| SECTION 6 - ACCIDENTAL RELEASE MEASURES |
|-----------------------------------------|

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ventilate the area. Evacuate unnecessary personnel. Large spills should be handled carefully. Put on respiratory protection and necessary personal protective equipment. Dike or impound spilled liquid. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Repeat sorbent/sweep cycle until the spill has dried up. Avoid runoff into storm sewers and ditches which lead to waterways.

|                                  |
|----------------------------------|
| SECTION 7 - HANDLING AND STORAGE |
|----------------------------------|

HANDLING: Use only in a well ventilated area. Keep out of reach of children. If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

STORAGE: Keep container closed when not in use.

|                                                   |
|---------------------------------------------------|
| SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION |
|---------------------------------------------------|

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved respiratory protection when the product is mixed or applied in a poorly ventilated area or if workplace levels of ingredients exceed the TLV. Follow applicable federal, state, and local regulations.

OTHER PROTECTIVE EQUIPMENT: Where contact is likely, wear chemical resistant gloves, chemical safety goggles with a face shield, and clean protective clothing to cover arms and legs to keep exposure to a minimum.

HYGIENIC PRACTICES: Do not take internally. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid breathing vapors from heated material.

|                                              |
|----------------------------------------------|
| SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES |
|----------------------------------------------|

|               |                |                |                       |
|---------------|----------------|----------------|-----------------------|
| BOILING RANGE | : 379 - 401 F  | VAPOR DENSITY  | : Is heavier than air |
| ODOR          | : Slight Sweet | ODOR THRESHOLD | : N.D.                |

(Continued on Page 4)

|                                              |
|----------------------------------------------|
| SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES |
|----------------------------------------------|

|                                             |             |                   |                      |
|---------------------------------------------|-------------|-------------------|----------------------|
| APPEARANCE                                  | : Liquid    | EVAPORATION RATE: | Is slower than Butyl |
| SOLUBILITY IN H2O                           | : Dilutable |                   | Acetate              |
| FREEZE POINT                                | : N.D.      | SPECIFIC GRAVITY: | 1.6000               |
| VAPOR PRESSURE                              | : N.D.      | pH @ 0.0 %        | : N.D.               |
| PHYSICAL STATE                              | : Liquid    | VISCOSITY         | : N.D.               |
| COEFFICIENT OF WATER/OIL DISTRIBUTION: N.D. |             |                   |                      |

(See Section 16 for abbreviation legend)

|                                       |
|---------------------------------------|
| SECTION 10 - STABILITY AND REACTIVITY |
|---------------------------------------|

CONDITIONS TO AVOID: Long term exposure to elevated temperatures.

INCOMPATIBILITY: Avoid contact with oxidizing material.

HAZARDOUS DECOMPOSITION PRODUCTS: Acrid fumes. Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

|                                       |
|---------------------------------------|
| SECTION 11 - TOXICOLOGICAL PROPERTIES |
|---------------------------------------|

PRODUCT DERMAL LD50: No Information  
PRODUCT LC50: No Information

PRODUCT ORAL LD50: No Information

COMPONENT TOXICOLOGICAL INFORMATION:

|                         |                   |                   |                |
|-------------------------|-------------------|-------------------|----------------|
| ---- CHEMICAL NAME ---- | -- DERMAL LD50 -- | --- ORAL LD50 --- | ---- LC50 ---- |
| ethylene glycol         | 9530 uL/kg        | 4700 mg/kg        | 10876 mg/kg    |
| mica                    | No Information    | No Information    | No Information |
| titanium dioxide        | No Information    | > 7500 mg/kg      | No Information |
| Silica, quartz          | No Information    | No Information    | No Information |
| Calcium carbonate       | No Information    | 6450 mg/kg        | No Information |

|                                     |
|-------------------------------------|
| SECTION 12 - ECOLOGICAL INFORMATION |
|-------------------------------------|

ECOLOGICAL INFORMATION: No Information.

|                                      |
|--------------------------------------|
| SECTION 13 - DISPOSAL CONSIDERATIONS |
|--------------------------------------|

DISPOSAL METHOD: Review all local, state, and federal regulations concerning health and pollution for appropriate disposal procedures.

(Continued on Page 5)

|                                         |
|-----------------------------------------|
| SECTION 14 - TRANSPORTATION INFORMATION |
|-----------------------------------------|

DOT PROPER SHIPPING NAME: Not Regulated

DOT TECHNICAL NAME: N.A.

DOT HAZARD CLASS: N.A.

HAZARD SUBCLASS: N.A.

DOT UN/NA NUMBER: N.A.

PACKING GROUP: N.A.

RESP. GUIDE PAGE:

DOT PLACARD AT: N.A.

DOT CLASS NUMBER: N.A.

UN PROPER SHIPPING NAME: Not Regulated

UN HAZARD CLASS: N.A.

UN CLASS NUMBER: AIR N.A.

MARINE N.A.

HAZARD SUBCLASS: AIR N.A.

MARINE N.A.

UN UN/NA NUMBER: N.A.

UN PACKING GROUP: AIR N.A. MARINE N.A.

UN PLACARD AT: N.A.

|                                     |
|-------------------------------------|
| SECTION 15 - REGULATORY INFORMATION |
|-------------------------------------|

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD    CHRONIC HEALTH HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

| ----- CHEMICAL NAME ----- | CAS NUMBER | WT/WT % IS LESS THAN |
|---------------------------|------------|----------------------|
| ethylene glycol           | 107-21-1   | 5.0 %                |

TOXIC SUBSTANCES CONTROL ACT:

(Continued on Page 6)

|                                     |
|-------------------------------------|
| SECTION 15 - REGULATORY INFORMATION |
|-------------------------------------|

## TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

| ----- CHEMICAL NAME ----- | CAS NUMBER |
|---------------------------|------------|
| None known.               |            |

## U.S. STATE REGULATIONS: AS FOLLOWS -

## CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

| ----- CHEMICAL NAME ----- | CAS NUMBER |
|---------------------------|------------|
| dioxane                   | 123-91-1   |
| Silica, quartz            | 14808-60-7 |
| Formaldehyde              | 50-00-0    |
| inorganic lead            | 7439-92-1  |
| nickel                    | 7440-02-0  |
| Arsenic                   | 7440-38-2  |
| Cadmium                   | 7440-43-9  |
| ethylene oxide            | 75-21-8    |

## INTERNATIONAL REGULATIONS: AS FOLLOWS -

This product contains material not included on the Canadian Domestic Substance List (DSL).

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

|                                |
|--------------------------------|
| SECTION 16 - OTHER INFORMATION |
|--------------------------------|

HMIS RATINGS - HEALTH: 1      FLAMMABILITY: 1      REACTIVITY: 0  
PERSONAL PROTECTION: B

PREVIOUS MSDS REVISION DATE: 09/13/99

REASON FOR REVISION: General overview

VOLATILE ORGANIC COMPOUNDS (VOCs): 0.48 lbs/gal, 58 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established,  
N.D. - Not Determined

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(Continued on Page 7)

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|            |
|------------|
| DISCLAIMER |
|------------|

This information is furnished without warranty, representation, or license of any kind, except that this information is accurate to the best of ChemRex's knowledge, or is obtained from sources believed by ChemRex to be accurate. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use thereof. Chemrex assumes no responsibility for injuries proximately caused by use of the Material if reasonable safety procedures are not followed as stipulated in this Data Sheet. Additionally, ChemRex assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. Buyer assumes the risk in its use of the Material.

---

<END OF MSDS>



## EVERCOAT 7000S

### HIGH MODULUS WATERPROOF COATING

#### DESCRIPTION

**EVERCOAT 7000S** is the next generation in acrylic elastomeric wall coatings. Its Elongation and tensile strengths eclipse traditional water based systems providing unsurpassed resistance to damage from substrate movement and the elements.

**EVERCOAT 7000S** is a single component, high build, water based material excellent for waterproofing a variety of masonry surfaces, even if they are badly cracked.

**EVERCOAT 7000S** is very flexible, it will not only bridge existing cracks during typical building movement, but can prevent the appearance of new cracks as well.

**EVERCOAT 7000S** can "breathe" allowing water vapor already trapped in the wall to escape. Trapped moisture can cause blistering and peeling in other coatings.

#### FEATURES

- ◆ **Rohm and Haas** Acrylic Technology
- ◆ **Durability** - Excellent resistance to the elements and U.V. degradation.
- ◆ **Color Retention**- Only colorfast, alkali resistant pigments are used.
- ◆ **Flexibility** - Crack bridging and impact resistance even at very low temperatures
- ◆ **Adhesion**-Good alkali resistance & excellent adhesion to cement & mortar type surfaces.
- ◆ **Dirt pick up**- Several innovative technologies combine to resist the accumulation of dirt on the coating surface and discoloring of a finish.
- ◆ **Longevity**- will retard the carbonation of concrete, extending the life of the building.
- ◆ **Mildew Resistant** - Superior mold and mildew resistance.
- ◆ **Environment Friendly** Waterbased, low VOC. Asbestos, lead, and mercury free.

#### USES

**W**aterproof aged, new, and previously painted above-grade masonry, concrete, concrete block and stucco. May also be used on properly prepared wood and metal.

**C**onceal and protect irregularities in an otherwise sound surface, including repairs, small cracks, crazing, porosity, and small voids.

**R**epair active cracks in conjunction with Evercoat 702, a high strength polyester reinforcing fabric. This combination gives a fast, effective, less expensive repair that is less obvious than other systems for active cracks. Flashings and joints can also be sealed this way if caulking is not practical.

**B**eautify any building with a low sheen finish available in many fade resistant colors.

## **SPECIFICATION DATA**

|                                              |                    |
|----------------------------------------------|--------------------|
| <b>Solids by Weight</b>                      | <b>70 ± 1%</b>     |
| <b>Solids by Volume</b>                      | <b>60 ± 2%</b>     |
| <b>Viscosity (KU)</b>                        | <b>125 - 135</b>   |
| <b>Weight(lb/gal)</b>                        | <b>11.0</b>        |
| <b>VOC (Calculated g/L)</b>                  | <b>69</b>          |
| <b>Elongation (D412)</b>                     | <b>437%</b>        |
| <b>Tensile (D412)</b>                        | <b>601psi</b>      |
| <b>Water Vapor Permeability</b>              | <b>6</b>           |
| <b>Low Temp Flex(1/2" mandrel)</b>           | <b>-30°F</b>       |
| <b>Wind-Driven Rain (TT-C-555B)</b>          | <b>PASS</b>        |
| <b>Theoretical Yield (mils/gal/100sq.ft)</b> | <b>8.0</b>         |
| <b>Dry time (@ 77° F and 50% Humidity)</b>   |                    |
| <b>Touch</b>                                 | <b>3 hrs</b>       |
| <b>Recoat</b>                                | <b>12 - 24 hrs</b> |

## **COVERAGE**

For optimum crack bridging and waterproofing EVERCOAT 7000S should be applied in two coats to achieve a final film thickness of 18 mils for masonry and 28 mils for wood.

Coverage varies depending on porosity and roughness of surface.

| Surface | Typical                                     | Coat            | Sq. Ft. / gal |
|---------|---------------------------------------------|-----------------|---------------|
| Porous  | Stucco, Concrete Block, Wood sheet products | 1 <sup>st</sup> | 50-60         |
|         |                                             | 2 <sup>nd</sup> | 60-70         |
| Smooth  | Smooth Concrete, Previously painted         | 1 <sup>st</sup> | 80-90         |
|         |                                             | 2 <sup>nd</sup> | 90-100        |

## **SURFACE PREPARATION**

All surfaces must be sound, clean, dry, and free of any contamination that would inhibit adhesion. After preparation, always ensure that all residues of cleaners, dust, and powdered masonry are removed and the surface is dry.

### **MILDEW**

Wash mildewed surfaces with a solution of 16 fl. oz liquid household bleach and 2 fl. oz liquid detergent per gallon of water.

### **EFFLORESCENCE**

Can be removed using a wire brush or a 10% solution of muratic acid.

### **DIRT OR OILS**

High pressure water washing(2000psi min) with soap and water is effective.

### **CHALK, HEAVY RESIDUES**

Use high pressure water washing (2000psi min) or light abrasive blasting.

### **PEELING, LOOSE OR OXIDIZED PAINT**

Abrasive blasting or chemical etching should be used.

## **CRACK REPAIR**

Cracks need to be repaired for coating. Normal surface preparation should be

completed on the cracks before repair. The repair method used varies depending on crack size.

♦ **HAIRLINE SURFACE CRACKS**

These are from surface stress and can be coated with EVERCOAT 7000S.

♦ **UP TO 1/32 INCH CRACKS**

These cracks should be brushed with EVERCOAT 7000S until the crack surface is uniform. Repeat the process after 4 hours if shrinkage or seepage into the crack has occurred.

♦ **UP TO 1/16 INCH CRACKS**

Fill the crack with an Everest approved 100% acrylic caulk. Force the sealant into the crack as far as possible using a brush, putty knife, or trowel. Leave the caulk surface raised so that a smooth finish will be obtained after shrinkage.

♦ **UP TO 3/8 INCH CRACKS**

These should be repaired using EVERCOAT 701 polyester fabric 3" rolls. Brush apply 20 wet mils of EVERCOAT 7000S 1.5" - 2" on either side of the crack. With coating still wet, embed the fabric lengthwise over the crack into the coating. Smooth out the fabric, removing air bubbles and creases. Feather edges, immediately apply a heavy coat of EVERCOAT 7000S (20 mils minimum), and feather edges a further 2 inches beyond the fabric to hide the patch.

♦ **JOINTS**

Joints can be treated as above, as long as 40% of the fabric width is on either side of the opening and a depression in the fabric is made equal to 25% of the joint width. Joints over 1/16" may be caulked with an Everest approved sealant with a foam backer rod then treated as above.

## **EQUIPMENT**

EVERCOAT 7000S can be applied by spray

or roller and by brush (for small areas).

**Brush:** Use a high quality nylon or nylon-polyester brush; use light strokes to get necessary film thickness. Avoid over brushing which causes air bubbles.

**Roller:** Use a high quality, quick-release, synthetic roller cover with a 1-1.5" nap. Work in sections 4 foot wide and maintain a wet edge. Once sufficient coating is applied, roll away from coated areas with light downward strokes. Avoid rapid rolling which causes air bubbles.

**Airless Spray:** Use a pump capable of a flow rate of 1 GPM or more. Use 0.035" to 0.039" orifice tips.

## **APPLICATION**

### **Plywood/OSB**

Normally will not require a primer. Before coating the wall prepare joints with 3 inch Evercoat 701 polyester seam tape (see section on treatment of joints). Once coating of joints has cured, coat whole wall to achieve 28 dry mils in two coats. (approximately 1 ¾ gallons each coat)

### **New Masonry**

Should be cured for at least 30 days. Some substrates such as tilt-up concrete or other highly alkaline surfaces must be coated with an Everest approved alkali resistant primer. See your Everest representative for recommendations.

### **Porous or Rough Surfaces**

These surfaces, such as uncoated concrete block, need back rolling within four to five minutes of spraying to minimize pinholes. If substrate is very porous the first coat can be thinned with up to a quart of water per 5 gallons.

### **Uncoated Stucco**

Stucco must be cured for at least 30 days. Stucco should not be badly cracked or flaking, and should be fully adhered to the substrate. If it is very porous the first coat should be thinned.

## **CLEAN UP**

Can be cleaned up with soap and warm water.

## **THINNING**

Do not thin product unless applying as first coat to a very porous substrate. Thinning will reduce final film thickness and compromise performance. If necessary, thin with up to one quart of water per five gallons of product.

## **TECHNICAL SUPPORT**

Call the Everest Technical hot-line for specific recommendations regarding your project.  
Toll free at 1(888) ECI-COAT

## **PRECAUTIONS**

Stir product at slow speed before use. It is very important to avoid entrapment of air while mixing. Air entrapment will compromise product performance

Do not apply when ambient temperature is below or is forecast to be below 50°F. Cold temperatures and high humidity will retard drying.

Store in tightly closed containers and protect from freezing and excessive heat.

New masonry must be cured for at least 28 days before application.

With mastic paints, an experienced applicator is required for a uniform finish. Finish will be affected by application pattern, film thickness, porosity, and climatic conditions. The manufacturer cannot assume responsibility for the finished appearance.

Do not use below grade or where moisture can migrate behind coating.

Do not apply any coatings over EVERCOAT 7000S as elastomeric properties will be compromised and crazing may occur.

EVERCOAT 7000S coatings are not intended for use as a vapor and/or a fire barrier. Do not use for these purposes.

**Disclaimer:** Our data is based on information from laboratory tests which are believed to be accurate but all recommendations are made without warranty, since the conditions of use are beyond Everest Coatings, Inc. control. We do not assume any liability or responsibility of the product relative to coverage, performance, or injury resulting from its use. Liability, if any, is limited to replacement of product.

**1/2000**



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

EVERCOAT 7000

MSDS Date : 07/30/99

### COMPANY IDENTIFICATION

Everest Coatings  
P.O. Box 394  
Spring, TX 77383-0394

### EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY : 281-350-9800  
SPILL EMERGENCY : 281-350-9800  
CHEMTREC : 800-424-9300

## 2. COMPOSITION/INFORMATION ON INGREDIENTS.

| No |                   | CAS REG NO    | WEIGHT (%) |
|----|-------------------|---------------|------------|
| 1  | Acrylic polymer   | Not Hazardous | < 45 - 55  |
| 2  | Titanium Dioxide  | 13463-67-7    | <10.0      |
| 3  | Calcium Carbonate | 1317-65-3     | <40.0      |
| 4  | Hydrated Alumina  | 21645-51-2    | <10.0%     |
| 5  | Zinc Oxide        | 1314-13-2     | <5.0%      |
| 6  | Ammonia           | 7664-41-7     | 0.2 MAX.   |
| 7  | Water             | 7732-18-5     | 54-56      |
| 8  | Ethylene Glycol   | 107-21-1      | <2.0%      |

See Section 8, Exposure Controls / Personal Protection

## 3. HAZARDS IDENTIFICATION

### Primary Routes of Exposure

Inhalation  
Skin Contact  
Eye Contact

### Inhalation

Inhalation of vapor or mist can cause the following:  
- headache - nausea - irritation of nose, throat, and lungs

### Eye Contact

Direct contact with material can cause the following:  
- slight irritation

### Skin Contact

Prolonged or repeated skin contact can cause the following:  
- slight skin irritation



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#### **4. FIRST AID MEASURES**

##### Inhalation

Move subject to fresh air.

##### Eye Contact

Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

##### Skin Contact

Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists.

##### Ingestion

If swallowed, give 2 glasses of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

---

#### **5. FIRE FIGHTING MEASURES**

|                                 |                |
|---------------------------------|----------------|
| Flash Point .....               | Noncombustible |
| Auto-ignition Temperature ..... | Not Applicable |
| Lower Explosive Limit .....     | Not Applicable |
| Upper Explosive Limit .....     | Not Applicable |

##### Unusual Hazards

Material can splatter above 100°C/212°F. Polymer film can burn.

##### Extinguishing Agents

Use extinguishing media appropriate for surrounding fire.

##### Personal Protective Equipment

As in any fire wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

---

#### **6. ACCIDENTAL RELEASE MEASURES**

##### Personal Protection

Appropriate protective equipment must be worn when handling a spill of this material. See Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION for recommendations. If exposed to material during clean-up operations, see Section 4, FIRST AID MEASURES for actions to follow.

##### Procedures

Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.



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## **7. HANDLING AND STORAGE**

### **Storage Conditions**

Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1°C/34°F. The maximum recommended storage temperature for this material is 49°C/120°F.

### **Handling Procedures**

Mists can form when material is sprayed. See Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION for types of ventilation required.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Exposure Limit Information**

| No |                         | CAS REG NO    | WEIGHT (%) |
|----|-------------------------|---------------|------------|
| 1  | Acrylic polymer .....   | Not Hazardous | 40-45      |
| 2  | Titanium Dioxide .....  | 13463-67-7    | <10.0      |
| 3  | Calcium Carbonate ..... | 1317-65-3     | <40.0      |
| 4  | Hydrated Alumina        | 21645-51-2    | <10.0%     |
| 5  | Zinc Oxide              | 1314-13-2     | <5.0%      |
| 6  | Ammonia .....           | 7664-41-7     | 0.2 MAX.   |
| 7  | Water .....             | 7732-18-5     | 54-56      |
| 8  | Ethylene Glycol .....   | 107-21-1      | <2.0%      |

| Comp.<br>No. | Units             | OSHA |     |      | ACGIH |      |
|--------------|-------------------|------|-----|------|-------|------|
|              |                   | TWA  | PEL | STEL | TWA   | STEL |
| 1            |                   | None |     | None | None  | None |
| 2            | mg/m <sup>3</sup> | 15   |     | None | 10b   | None |
| 3            | mg/m <sup>3</sup> | 5a   |     | None | 10b   | None |
| 4            | mg/m <sup>3</sup> | 5a   |     | None | 10b   | None |
| 5            | mg/m <sup>3</sup> | 5a   |     | None | 10b   | None |
| 6            | Ppm               | None |     | 35   | 25    | 35   |
| 7            |                   | None |     | None | None  | None |
| 8            | mg/m <sup>3</sup> | None |     | None | None  | None |

### **Respiratory Protection**

None required if airborne concentrations are maintained below the TWA/TLV's listed in Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION. For airborne concentrations up to 10 times the TWA/TLV's listed in Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with organic vapor cartridges.

### **Eye Protection**

Use chemical splash goggles (ANSI Z87.1 or approved equivalent).





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#### Hand Protection

The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection:  
- Neoprene

#### Engineering Controls (Ventilation)

Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

#### Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility.

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### **9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                    |                           |
|------------------------------------|---------------------------|
| Appearance .....                   | Milky                     |
| Color .....                        | White                     |
| State .....                        | Liquid                    |
| Odor Characteristic .....          | Ammonia odor              |
| pH .....                           | 9.0-9.8                   |
| Viscosity .....                    | 10,000 CPS Minimum        |
| Specific Gravity (Water = 1) ..... | 1.3-1.5                   |
| Vapor Density (Air = 1) .....      | < 1 Water                 |
| Vapor Pressure .....               | 17 mm Hg @20°C/68°F Water |
| Melting Point .....                | 0°C/32°F Water            |
| Boiling Point .....                | 100°C/212°F Water         |
| Solubility in Water .....          | Dilutable                 |
| Percent Volatility .....           | 30-40 % Water             |
| Evaporation Rate (BAc = 1) .....   | < 1 Water                 |

See Section 5, Fire Fighting Measures

---

### **10. STABILITY AND REACTIVITY**

#### Instability

This material is considered stable. However, avoid temperatures above 177°C/350°F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

#### Hazardous Decomposition Products

Thermal decomposition may yield acrylic monomers.

#### Hazardous Polymerization

Product will not undergo polymerization.

#### Incompatibility

There are no known materials which are incompatible with this product.



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## **11. TOXICOLOGICAL INFORMATION**

### Acute Data

No Toxicity data are available for this material

The information shown in Section 3, HAZARDS IDENTIFICATION is based on the toxicity profiles for similar materials or components present in this material.

---

## **12. ECOLOGICAL INFORMATION**

No Applicable Data

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## **13. DISPOSAL CONSIDERATIONS**

### Procedure

Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

---

## **14. TRANSPORT INFORMATION**

US DOT Hazard Class ..... NONREGULATED

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## **15. REGULATORY INFORMATION**

### Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

### SARA TITLE 3: Section 311/312 Categorizations (40CFR 370)

This product is a hazardous chemical under 29CFR 1910.1200, and is categorized as an immediate and delayed health hazard

### SARA TITLE 3: Section 313 Information (40CFR 372)

This product contains Ethylene Glycol which is listed in Section 313.

### CERCLA Information (40CFR 302.4)

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.



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#### Waste Classification

When this product becomes a waste, it is classified as a non-hazardous waste under criteria of the Resource Conservation and Recovery Act (40 CFR 261).

#### United States

All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

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#### **16. OTHER INFORMATION**

| Everest Coatings<br>Hazard Rating |   | Scale           |
|-----------------------------------|---|-----------------|
| Toxicity                          | 1 | 4=EXTREME       |
| Fire                              | 0 | 3=HIGH          |
| Reactivity                        | 0 | 2=MODERATE      |
| Special                           | - | 1=SLIGHT        |
|                                   |   | 0=INSIGNIFICANT |

Ratings are based on Everest Coatings guidelines,  
and are intended for internal use.

#### ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists  
OSHA = Occupational Safety and Health Administration  
TLV = Threshold Limit Value  
PEL = Permissible Exposure Limit  
TWA = Time Weighted Average  
STEL = Short-Term Exposure Limit  
Bac = Butyl acetate

The information contained herein relates only to the specific material identified. Everest Coatings believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Everest Coatings urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.



## GE Sealants & Adhesives

### Product Name:

**VIP1550 CONCENTRATED WATER REPELLENT (VIP1550)**

### Product Description

VIP1550 Concentrated Water Repellent is a high performance, breathable, clear, low VOC, water repellent sealer that penetrates deeply into concrete and masonry surfaces to form a tenacious chemical and physical bond without altering the natural appearance of the substrate.

Prominent Features: Supplied in a 50% concentrate\* which is easily diluted with water · Effective in the reduction of chloride-ion (de-icing salts) penetration to minimize corrosion potential in steel reinforced concrete · Provides excellent water repellency to reduce cracking, spalling, freeze/thaw damage, chemical degradation, biological growth, efflorescence and dirt pickup · Very permeable, providing resistance to cracking and blistering · 6 month "pot life" after concentrate is mixed with water · No obnoxious odor · Non-flammable · Low VOC content.

· Goes on white, dries clear · U.V. Stable and not biodegradable · Does not change substrate appearance · Good performance on both neutral and highly alkaline surfaces · Soap and water clean up · Meets the standards of acceptability for concrete sealers established in NCHRP Report #244.

### Basic Uses

Uses: Can be used for forming an invisible water repellent barrier to protect a variety of horizontal substrates such as concrete driveways, walkways, brick paver and patio deck steps, and vertical masonry surfaces including but not limited to natural and synthetic stone, tilt up concrete, brick, clay tile, stucco and block.

### Technical Data

| Property                             | Value         | Test Method |
|--------------------------------------|---------------|-------------|
| % Solids by Weight                   | 50% Minimum   | Lab Value   |
| % Solids by Volume                   | 47.1% Minimum | Lab Value   |
| Viscosity: in seconds at 77°F (25°C) | 9             | Ford 4 Cup  |

Typical product data values should not be used as specifications. Assistance is available by contacting GE Sealants & Adhesives at 1-800-228-5537.

### Limitations

- Structures and substrates vary, consequently, it is important to test a small area prior to application to assure that the desired results and approximate coverage rates are determined.
- Not recommended for below grade application.
- Never apply material to any previously treated, stained or painted surface before conducting a test application to ensure compatibility. Spray water on the surface to be treated; if surface rapidly absorbs the water, then the surface is ready to be treated. If the water beads up, it may have been previously coated.
- Do not apply when temperature of surface or air is below 50°F (10°C).
- Do not apply sealer when temperatures are expected to fall below 40°F (4.4°C) within 4 hours of completed application.
- Do not apply if rain or threatening weather is expected within 24 hours.
- Never apply to frozen or frost covered substrates.
- Avoid spraying in strong wind conditions.
- Under normal circumstances, overspray will not affect most glass, metal, vinyl or painted surfaces. Remove shortly after with household cleaners.
- Not for food contact surfaces.
- Not recommended for wood.
- New concrete must be allowed to cure 3-7 days, depending on weather conditions before applying VIP1550.

## Surface Preparation

All surfaces must be sound and free of dust/dirt, laitance, oil, grease, efflorescence, mildew, chemical films, loose paint and any other contaminants. Unsound masonry must be wire brushed or blasted for a firm surface. Dirt, loose contaminants and chalk can be removed by high pressure chemical and water blasting. Other cleaning methods which are compatible with the application of VIP1550 Concentrated Water Repellent include: abrasive blasting (sand, baking soda, vacuum), acid etching, stripping, solvent de-greasing, caustic soda scrubbing, alkaline soap scrubbing, and high pressure water washing with sand. Note: If strongly or caustic cleaning agents are used, neutralize the surface and completely wash residues away.

Re-point any loose or disintegrated mortar and allow 72 hours drying time before application.

Caulking and Patching work must be done prior to application, allowing 6 to 12 hours to cure (or until set).

## Method of Application

**Mixing Instructions:** In a suitably sized clean mixing vessel, add water first (tap water is acceptable), then add the appropriate amount of VIP1550 Concentrated Water Repellent and stir mixture thoroughly prior to and periodically during application. Use a barrel stirring attachment on a power drill or a recirculating pump for mixing.

**VERTICAL APPLICATION:** Best results are achieved by using a wet-on-wet method of application. This means that during application the penetrant is applied twice in a cross hatch pattern. This insures maximum penetration and surface protection. Apply material in an overlapping pattern to minimize streaks and drips.

Apply from the bottom and work upwards, using low-pressure, non-atomizing spray. A 6 to 9 inch run-down (20 to 30 cm) during application is typical below the application spray point. It is more difficult to saturate the vertical surface evenly when using brushes or lambswool applicators. Any penetrant not absorbed in 3 to 4 minutes should be wiped dry.

**HORIZONTAL APPLICATION:** Apply appropriately diluted VIP1550 Concentrated Water Repellent mixture in a single wet-on-wet, cross hatch pattern. Any penetrant not absorbed in 3 to 5 minutes should be broomed out or wiped off. Do not allow puddles to dry on surface.

Note: A) For normal chloride ion intrusion protection on horizontal surfaces dilute one (1) part of VIP1550 with one (1) part water. B) For heavy duty uses, where frequent exposure to frost, deicing salts, etc., apply VIP1550 as supplied. C) Coverage should not exceed 200 square feet per gallon (5m<sup>2</sup>/L).

**Curing Information:** Once the diluted concentration of VIP1550 Concentrated Water Repellent is applied to a mineral surface, the extremely fine particles penetrate the substrate, and the hydrophilic component reacts chemically with the surface to which it has been applied. Note: it is effective "crosslinking" with the substrate which changes the chemical nature of the water soluble molecules, converting them slowly over a period of a few days to a water insoluble matrix. This produces the water-repellent surface, and yet still permits water vapor to pass and allows the surface to remain breathable. Protect the surface from water and rain for 6 to 8 hours minimum. Product achieves partial cure in approximately 72 hours and full cure in approximately 7 days, depending upon the relative humidity. Treated surfaces may be put into operation (foot traffic) in 12 to 14 hours in most cases (surface should be evenly light in color), indicating that the water has evaporated. Water beading will increase as cure time continues, maximum effects will occur after the seven (7) day cure time. It is important to understand that the ultimate water repellency of VIP1550 is based solely on the porosity of the substrate and the length of time required for the organic constituents of the material to align themselves to form a hydrophobic (non-water loving) zone on the masonry surface.

Do not apply sealants or coatings over surfaces coated with VIP1550 without testing for compatibility and adhesion.

## Equipment:

Low-pressure, non-atomizing spray is usually preferred but saturated brush, roller or lambswool application is typically used on some surfaces.

## Recommended Spread Rate & Coverage:

Coverage rate is dependent upon the porosity and type of substrate which needs to be treated. Dilution: Refer to Application Guidelines table for normal dilution ratios based on substrate to be treated. Note: these dilution and coverage rates have been established to Federal Specification SS-W-110C performance.

| APPLICATION<br>GUIDELINES:    | DILUTION RATIO<br>(By Volume): |                | COVERAGE<br>RATE: |                   | CALCULATIONS:<br>(Lab Values) |                         |                              |            |
|-------------------------------|--------------------------------|----------------|-------------------|-------------------|-------------------------------|-------------------------|------------------------------|------------|
| Substrate:                    | Parts<br>VIP1550               | Parts<br>Water | Sq. Ft.<br>Gallon | M <sup>2</sup> /L | % N.V.<br>Wt.<br>Active       | % N.V.<br>Wt.<br>Active | Approx. Dry<br>Thickness/Mil | VOC<br>g/L |
| Slate                         | 1                              | 0.4            | 450               | 11                | 29.2                          | 27.7                    | 0.98                         | 178.2      |
| Dense Brick                   | 1                              | 1              | 350               | 8.5               | 20.7                          | 19.4                    | 0.88                         | 178.2      |
| Exposed Aggregate<br>Concrete | 1                              | 1              | 325               | 8                 | 20.7                          | 19.4                    | 0.96                         | 178.2      |
| Porous Brick                  | 1                              | 3              | 150               | 3.7               | 10.4                          | 29.7                    | 1.03                         | 178.2      |
| Split Face Block              | 1                              | 4              | 125               | 3                 | 8.3                           | 7.7                     | 0.98                         | 178.2      |
| Stucco                        | 1                              | 4              | 125               | 3                 | 8.3                           | 7.7                     | 0.98                         | 178.2      |
| Sandstone                     | 1                              | 4              | 125               | 3                 | 8.3                           | 7.7                     | 0.98                         | 178.2      |
| Architectural<br>Concrete     | 1                              | 7              | 80                | 2                 | 5.2                           | 4.8                     | 0.96                         | 178.2      |
| Concrete Block                | 1                              | 7              | 80                | 2                 | 5.2                           | 4.8                     | 0.96                         | 178.2      |
| Clay Tile                     | 1                              | 7.5            | 75                | 1.8               | 5.0                           | 4.6                     | 0.98                         | 178.2      |
| Concrete Pavers               | 1                              | 14             | 40                | 1                 | 2.75                          | 2.6                     | 1.04                         | 178.2      |

\*Material: As supplied (Concentrated). These coverage rates are offered solely for estimating purposes. Coverage rates can vary considerably due to the porosity of a substrate. A test application will help determine actual coverage rates. Note: these coverage rates have been established in accordance with Federal Specification SS-W-110C performance.

Appearance: VIP1550 goes on WHITE in color but dries to a non-yellowing, non-film forming CLEAR water repellent penetrant.

Packaging: Material sold in 50% concentrated form. Container: 1 Gallon F-style, 4 per case.

#### Clean Up

Clean all equipment immediately after use with warm, soapy water.

VIP1550 Concentrated Water Repellent is available in the United States, through distributors. Contact your local distributor or the nearest GE Technical Service Center for cost and availability information.

#### Handling and Safety

Material Safety Data Sheets (MSDS) are available upon request from GE Sealants and Adhesives (GESA). Similar information for solvents and other chemicals used with GESA products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed. KEEP OUT OF REACH OF CHILDREN.

Do not allow material to freeze. Should VIP1550 freeze prior to use, it will be rendered totally ineffective.

#### Warranty

GE Sealants & Adhesives warrants the performance of this product, provided it is properly stored and applied before the "use before" date shown. If not satisfied, return product and/or proof of purchase to address below and GE Sealants & Adhesives will, at its option, replace or refund the purchase price of this product. GE shall in no event be liable for any other damages in excess of the amount of the purchase price. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR DEFECTS IN, OR FAILURE OF, THIS PRODUCT, AND THE SOLE AND EXCLUSIVE LIABILITY OF GENERAL ELECTRIC COMPANY THEREFOR. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Prior to considering use of a GE Sealants & Adhesives product in fulfilling any government requirement, please contact the Government and Trade Compliance Office at 413-448-4624

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VIP1550 (12/01)

FORMAT: USA

MATERIAL SAFETY DATA SHEET  
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SILANE/SILOXANE WATER REPELLANT

PAGE: 001

PRODUCT: VP1550

OMBRELLA

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY:  
GE SEALANTS & ADHESIVES  
260 HUDSON RIVER ROAD  
WATERFORD, NY 12188SUPPLIED BY:  
GE SEALANTS & ADHESIVES  
260 HUDSON RIVER ROAD  
WATERFORD, NY 12188EMERGENCY PHONE (24 HRS)  
518-237-3330EMERGENCY PHONE (24 HRS)  
518-237-3330REVISED: 08/11/00  
PREPARER: KE LINTZ  
CHEMICAL FAMILY/USE: SURFACING PREPARATION  
FORMULA: MIXTURE.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| PRODUCT COMPOSITION/<br>CAS REG NO. | APPROX.<br>WGT. % | ACGIH TLV<br>TWA | OSHA PEL<br>STEL | OSHA PEL<br>TWA | STEL | UNITS |
|-------------------------------------|-------------------|------------------|------------------|-----------------|------|-------|
| 1. HAZARDOUS                        |                   |                  |                  |                 |      |       |
| POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-  |                   |                  |                  |                 |      |       |
| ISOTRIDECYL-.OMEGA.-HYDROXY-        |                   |                  |                  |                 |      |       |
| 9043-30-5                           | 30-60             | NE               | NE               | NE              | NE   |       |
| MASONRY WATER REPELLANT             |                   |                  |                  |                 |      |       |
| VENDOR                              | 30-60             | NE               | NE               | NE              | NE   |       |
| ALKYLALCOHOL-POLYGLYCOLETHET        |                   |                  |                  |                 |      |       |
| VENDOR                              | 1-5               | NE               | NE               | NE              | NE   |       |
| ETHYLENE OXIDE                      |                   |                  |                  |                 |      |       |
| 75-21-8                             | <1PPB             | 1                | NE               | 1               | 5    | PPM   |
| 1,4-DIOXANE                         |                   |                  |                  |                 |      |       |
| 123-91-1                            | <1PPB             | 20 SKN           | NA               | 100 SKNNA       |      | PPM   |
| 2. NON-HAZARDOUS                    |                   |                  |                  |                 |      |       |
| AMINOALKYL-FUNCTIONAL-              |                   |                  |                  |                 |      |       |
| POLYDIMETHYLSILOXANE(S)             |                   |                  |                  |                 |      |       |
| MIXTURE                             | 1-5               | NE               | NE               | NE              | NE   |       |

See Section 15 for description of any WHMIS Trade Secret(s).

## 3. HAZARDS IDENTIFICATION

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

PRODUCT: VP1550

SILANE/SILOXANE WATER REPELLANT

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EMERGENCY OVERVIEW:

DANGER!

Irritating to skin, eyes, and respiratory tract.

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Refer to other MSDS sections for detailed information.

POTENTIAL HEALTH EFFECTS:

INGESTION:

May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

SKIN CONTACT:

Can cause irritation and reddening of the skin.

INHALATION:

Excessive inhalation causes headache, dizziness, nausea and incoordination.

Avoid breathing any vapors or mist generated during the processing of this material.

Can irritate mucous membranes and respiratory tract with coughing and shortness of breath.

EYE CONTACT:

Causes eye irritation.

MEDICAL CONDITIONS AGGRAVATED:

None known.

SUBCHRONIC (TARGET ORGAN) EFFECTS:

None known

CHRONIC EFFECTS/CARCINOGENICITY:

This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

PRODUCTS/INGREDIENTS

This space reserved for special use.

PRINCIPLE ROUTES OF EXPOSURE:

Dermal - skin.

Eyes.

Inhalation.

OTHER:

This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. An MSDS for formaldehyde is available from GE Silicones.

---

#### 4. FIRST AID MEASURES

INGESTION:

Do not induce vomiting. If victim is conscious, give 1-3 glasses of water to drink. Never give anything by mouth to

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

PRODUCT: VP1550

SILANE/SILOXANE WATER REPELLANT

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an unconscious person. Get medical attention if irritation persists.

SKIN:

Wash with soap and water.

Get medical attention if irritation or symptoms from Section 3 develop.

INHALATION:

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

EYES:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation

persists.

NOTE TO PHYSICIAN:

Treatment is symptomatic and supportive.

---

5. FIRE FIGHTING MEASURES

FLASH POINT: NA (C) NA (F)  
METHOD : NA  
IGNITION TEMP : NA (C) NA (F)  
FLAMMABLE LIMITS IN AIR - LOWER (%): NA  
FLAMMABLE LIMITS IN AIR - UPPER (%): NA  
SENSITIVITY TO MECHANICAL IMPACT (Y/N): NO  
SENSITIVITY TO STATIC DISCHARGE:  
Sensitivity to static discharge is not expected.  
EXTINGUISHING MEDIA:  
All standard firefighting media  
SPECIAL FIREFIGHTING PROCEDURES:  
Firefighters must wear NIOSH/MSHA approved positive pressure  
self-contained breathing apparatus with full face mask and full  
protective clothing.

---

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:  
Wipe, scrape or soak up in an inert material and put in a  
container for disposal.  
Wash walking surfaces with detergent and water to reduce slip-  
ping hazard.  
Wear proper protective equipment as specified in the protective  
equipment section.  
Keep out of water supplies and sewers.

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

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SILANE/SILOXANE WATER REPELLANT

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7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
Keep container closed when not in use.  
Avoid contact with skin and eyes.  
Do not inhale vapors.  
Avoid accidental ingestion of this material. Wash hands and  
face before eating, drinking, smoking, using toilet facilities,  
or applying cosmetics.  
Keep from freezing.  
Remove contaminated clothing and laundry before reuse.  
Keep away from children.  
Store between 40 F and 120 F.  
Product releases formaldehyde during curing.

---

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## ENGINEERING CONTROLS:

Showers.  
Eyewash stations.  
See "Ventilation" below.

## RESPIRATORY PROTECTION:

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29 CFR 1910.134).

## PROTECTIVE GLOVES:

Neoprene.

## EYE AND FACE PROTECTION:

Monogoggles.  
Safety glasses with side shields.

## OTHER PROTECTIVE EQUIPMENT:

Wear eye protection and protective clothing.

## VENTILATION:

Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

---

9. PHYSICAL AND CHEMICAL PROPERTIES

## PRODUCT INFORMATION:

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

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SILANE/SILOXANE WATER REPELLANT

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|                                                |   |        |         |     |
|------------------------------------------------|---|--------|---------|-----|
| BOILING POINT                                  | : | 100    | (C) 212 | (F) |
| VAPOR PRESSURE(20 C)(MM HG):                   | : | UNK    |         |     |
| VAPOR DENSITY (AIR=1)                          | : | >1     |         |     |
| FREEZING POINT                                 | : | UNK    | (C) UNK | (F) |
| MELTING POINT                                  | : | UNK    | (C) UNK | (F) |
| PHYSICAL STATE                                 | : | LIQUID |         |     |
| ODOR                                           | : | UNKN   |         |     |
| COLOR                                          | : | CLEAR  |         |     |
| ODOR THRESHOLD (PPM)                           | : | UNK    |         |     |
| % VOLATILE BY VOLUME                           | : | 69.4   |         |     |
| EVAP. RATE(BUTYL ACETATE=1):                   | : | <1     |         |     |
| SPECIFIC GRAVITY (WATER=1)                     | : | UNK    |         |     |
| DENSITY (KG/M3)                                | : | UNK    |         |     |
| ACID/ALKALINITY (MEQ/G)                        | : | UNK    |         |     |
| PH                                             | : | UNK    |         |     |
| VOC EXCL.H2O & EXEMPTS(G/L):                   | : | 0.5    |         |     |
| SOLUBILITY IN WATER (20 C)                     | : | UNKN   |         |     |
| SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): | : | UNKN   |         |     |

---

10. STABILITY AND REACTIVITY

## STABILITY:

STABLE

## HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

## HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:

Carbon monoxide.

Carbon dioxide.  
Silicon dioxide.  
Formaldehyde.  
Hydrocarbons

## INCOMPATIBILITY (MATERIALS TO AVOID):

Strong alkalies.  
Strong Oxidizing Agents  
Strong acids

## CONDITIONS TO AVOID:

Strong oxidizers and this product may liberate hydrogen gas.  
Avoid contact with strong acids and strong bases.

---

11. TOXICOLOGICAL INFORMATION

## PRODUCT INFORMATION:

ACUTE ORAL LD50 (MG/KG): NONE FOUND

ACUTE DERMAL LD50 (MG/KG): NONE FOUND

ACUTE INHALATION LC50 (MG/L): NONE FOUND

## OTHER:

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

PRODUCT: VP1550

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None.

AMES TEST:

UNKNOWN

---

12. ECOLOGICAL INFORMATION

## ECOTOXICOLOGICAL INFORMATION:

No data at this time

## CHEMICAL FATE INFORMATION:

No data at this time

---

13. DISPOSAL CONSIDERATIONS

## DISPOSAL METHOD:

Disposal should be made in accordance with federal, state and  
local regulations.

---

14. TRANSPORT INFORMATION

DOT SHIPPING NAME:

NONE

DOT HAZARD CLASS:

NOT DOT REGULATED

DOT LABEL(S):

NONE

UN/NA NUMBER:

NONE

PLACARDS:

NONE

IATA:

NOT REGULATED BY IATA

IMO IMDG-code:

NOT REGULATED FOR OCEAN TRANSPORTATION

EMS No:

NA

EUROPEAN CLASS:

RID (OCTI): NONE  
ADR (ECE) : NONE  
RAR (IATA): NONE

---

15. REGULATORY INFORMATION

SARA SECTION 302:

None Found

SARA (311,312) HAZARD CLASS:

NONE

SARA (313) CHEMICALS:

THIS PRODUCT CONTAINS TOXIC CHEMICAL(S) LISTED BELOW WHICH IS(ARE) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

PRODUCT: VP1550

SILANE/SILOXANE WATER REPELLANT

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ETHANOL, 2-(2-METHOXYETHOXY)-  
(111-77-3)

CPSC CLASSIFICATION: NA

WHMIS HAZARD CLASS:

D2B TOXIC MATERIALS

WHMIS TRADE SECRET:

None

EXPORT:

SCHDLE B/HTSUS: 3809.91 Water Repellent Agents

ECCN:

-

HAZARD RATING SYSTEMS

HMIS

FLAMMABILITY 0 , REACTIVITY 0 , HEALTH 1

NFPA

FLAMMABILITY 0 , REACTIVITY 0 , HEALTH 1

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS CALIFORNIA PROPOSITION 65 CHEMICALS WHICH ARE LISTED BELOW:

1,4-DIOXANE (123-91-1)

ETHYLENE OXIDE (75-21-8)

---

16. OTHER INFORMATION

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

C = ceiling limit

NEGL = negligible

EST= estimated

NF = none found

NA = not applicable

UNKN = unknown

NE = none established

REC = recommended

ND = none determined

V = recomm. By vendor

By-product = reaction by-product, TSCA inventory

SKN = skin

TS = trade secret

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VP1550.txt  
status not required under R = recommended  
40 CFR part 720.30(h-2) MST = mist  
STEL = short term exposure NT = not tested  
limit

.....  
California Proposition 65:  
WARNING! This product contains a chemical known to the State  
of California to cause cancer, birth defects, or other  
reproductive harm.

\*\*\* CONTINUED ON NEXT PAGE \*\*\*

PRODUCT: VP1550

SILANE/SILOXANE WATER REPELLANT

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California Proposition 65...  
Warning! This product contains a chemical known to the State  
of California to cause birth defects or other reproductive harm.  
.....

\*

DATE PRINTED: 08/16/02



**Construction Chemicals, Inc.**



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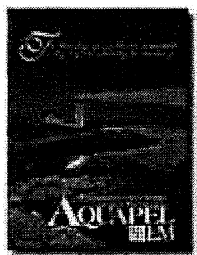
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## Aquapel & Aquapel Plus

New Generation, Micro-Emulsion, Silane/Siloxane Water Repellent

[Click Here](#) to request the **Free Aquapel Literature**

### Product Description

AQUAPEL is a new generation, 100% reactive, waterborne silane-siloxane sealer. This clear, penetrating, breathable water repellent is ideal for use on interior and exterior, above grade concrete. AQUAPEL penetrates the surface and chemically bonds directly with the substrate which results in a surface that is highly resistant to both moisture and salt.

AQUAPEL's unique, odorless, VOC compliant formulation offers permanent, invisible, non-yellowing protection. AQUAPEL's accelerated chemical reaction with the natural minerals in the substrate produces a stable and predictable hydrophobic surface within seven to ten days after application.

AQUAPEL is available in two concentrations. Regular AQUAPEL is ideal for normal duty, cast-in-place concrete with moderate exposure to salt and/or water; AQUAPELPLUS is for increased long-term protection on porous concrete, elevated structural concrete slabs, and normal concrete with severe exposure to salt and water.

*Basic Use:* AQUAPEL effectively protects buildings, parking decks, monuments, and virtually all concrete surfaces. It offers positive salt screening in northern, as well as southern climates. AQUAPEL's non-flammable, non-volatile formula minimizes corrosion of reinforcing steel and protects concrete from the damaging effects of deicer chemicals, road salts, and other chemicals. AQUAPEL's successful field and lab performance make it ideal for walkways, stairs, parking decks, garages, driveways, dams, piers, bus and truck terminals, precast and prestress concrete. Other uses include architectural concrete, concrete and brick pavers, and exposed aggregate surfaces.

### Features & Benefits

- Effectively stops moisture and salt migration
- Odorless/VOC compliant formulation
- Deeply penetrates substrate for long-term hydrophobic protection
- Ready-to-use, non-flammable, non-volatile formulation
- Environmentally safe.
- Invisible, non-darkening.

*Limitations:* AQUAPEL should not be applied if air, product, and/or surface temperature is below 4°C (40°F) or above 40°C (100°F). Avoid application if precipitation is expected within four hours, or if rain has preceded the application in the past 24 hours. AQUAPEL is not

USA:  
1-800-362-3331

Worldwide:  
402-453-6600

intended for below grade waterproofing. Over application of AQUAPEL may cause a slight darkening of the surface. Avoid application in high winds.

### Estimating

AQUAPEL is packaged ready-to-use in 3.875 liter (1 gal.), 19 liter (5 gal.) pails, and 208 liter (55 gal.) drums. Containers are identified with product name and batch code. Shelf life in unopened containers is 1 year.

### Technical Specs

#### TECHNICAL DATA

| AQUAPEL                                                          | AQUAPELPLUS |
|------------------------------------------------------------------|-------------|
| Color, Milky White Liquid                                        |             |
| Dries Clear                                                      |             |
| Surface Gloss                                                    |             |
| None                                                             | None        |
| NCHRP 244 Series II, Water Absorption Reduction, % min.          |             |
| 84                                                               | 85          |
| NCHRP 244 Series II, Chloride Intrusion Reduction, % min.        |             |
| 84                                                               | 90          |
| Depth of Penetration (mm)<br>(Depending upon substrate porosity) |             |
| 2-4                                                              | 2-4         |
| ASTM C 672, Scaling Test<br>(0 rating="no scaling")              |             |
| 0                                                                | 0           |
| SS-W-110 C, Water Absorption, Brick, % effective                 |             |
| 88                                                               | 92          |
| Number of Coats, normally                                        |             |
| One                                                              | One         |
| Application Rate, average                                        |             |
| 125                                                              | 125         |
| VOC                                                              |             |
| <50                                                              | <50         |

#### COVERAGE RATE

Average rate is determined by surface porosity

| Surface Type    | m <sup>2</sup> /L | SF/gal  |
|-----------------|-------------------|---------|
| Porous Surfaces | 2.5-3.0           | 100-125 |
| Broom Finish    | 3.5-5.0           | 100-150 |



## Smooth Concrete 2.5-3.5 150-200

### Installation

*Preparation:* Concrete must be structurally sound and clean of all dirt, laitance, contaminants, oil, existing coatings or membrane curing compounds by chemical or mechanical means. Remove unsound concrete. Repair deteriorated area with DURAPATCH. Rout and fill cracks. Caulking and sealant materials must cure a minimum of 12 hours before applying AQUAPEL.

*New Concrete:* Apply non-residual curing compound, L&M CURE, or water cure fresh concrete for best results. Allow concrete to cure a minimum of 21 days before applying AQUAPEL. Remove surface laitance and other contaminants by pressure wash.

*Installation:* Stir AQUAPEL before using to disperse active ingredients. Do not dilute. Apply AQUAPEL directly from sealed containers using low pressure (1.5 kg/cm/20 psi) spray with fan nozzle, roller or bristle broom.. Apply in a single, uniform, saturating application. Broom out all puddles. On extremely porous substrates, two coats may be necessary. Apply second coat as soon as surface drying of first coat has become visible.

*Clean Up:* Clean up equipment and overspray immediately with soap and water. For dry material use mineral spirits.

**NOTE:** In approximately seven to ten (7-10) days after application, surfaces treated with AQUAPEL or AQUAPEL PLUS will develop full, long-term water repellent properties.

### Precautions

Applicators should wear rubber gloves and eye protection. Protect glass, plastic products, shrubbery, and plant life from overspray by masking, using drop cloths, tarps, etc. Do not allow overspray to remain on these materials beyond the workday. Avoid contact with all food stuffs. Protect containers from direct sunlight, rain, and freezing. AQUAPEL is destroyed by freezing. Please refer to the material safety data sheet (MSDS) for more detailed information.

### Warranty

L&M warrants that AQUAPEL and AQUAPELPLUS in sealed containers are VOC compliant, free of contaminants, and, when used as instructed, will provide effective protection to treated surfaces from moisture and chloride-ion penetration. Contact L&M for available five and ten year performance warranty.

### Technical Services

L&M recommends that the user request the service of the local representative for a pre-job conference to plan the installation of AQUAPEL. To the extent that job site services are provided, such services are in the nature of technical recommendations only and will not include supervision or quality control of application procedures or engineering details.

### Fax On Demand

Instant access to Concrete Information. L&M's exclusive Fax On Demand offers instant access to Tech Data Sheets, MSDS Sheets, test data, product updates, and vital information. Simply call 1-800-839-9887 and follow the easy steps to Fax On Demand. L&M is ready to respond instantly to your fax machine - anytime - anywhere!

### Short Spec

07180: Water repellent treatment (Horizontal Concrete):

A) (Cast in place concrete with moderate exposure for salt and/or water). VOC compliant, odorless, silane/siloxane blend. Surpasses NCHRP 244, Series II, reducing water and salt penetration by 84%. "AQUAPEL" by L&M Construction Chemicals, Inc. Five year warranty.

B) (Porous concrete surfaces or normal concrete with severe exposure to salt and/or water.) VOC compliant, odorless, silane/siloxane blend. Surpasses NCHRP 244 Series II, reducing water penetration by 85% and salt penetration by 90%. "AQUAPEL+PLUS" by L&M Construction Chemicals, Inc. Ten year warranty.

C) For vertical applications, see HYDROPEL WB and/or HYDROBLOCK.

#704081-2  
November 11, 1997

Privacy Statement

**MATERIAL SAFETY DATA SHEET**  
Prepared according to 29 CFR 1910.1200

DATE PREPARED: September, 1991  
DATE REVISED: March, 2001

PAGE 1  
MSDS NO: 221

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**SECTION I - IDENTIFICATION**

L&M CONSTRUCTION CHEMICALS, INC.  
14851 CALHOUN ROAD  
OMAHA, NE 68152

ASSISTANCE (CHEMTREC) 800-424-9300  
EMERGENCY PHONE NO. 402-453-6600

ID NO.: Non-regulated

PRODUCT  
NAME: **AQUAPEL**

DOT CLASS: Non-regulated

CHEMICAL  
NAME: Alkylalkoxysilane Solution

DOT SHIPPING  
NAME: Non-regulated

---

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

| INGREDIENTS | OSHA PEL | ACGIH TLV | CAS |
|-------------|----------|-----------|-----|
|-------------|----------|-----------|-----|

Unlisted ingredients are not hazardous per OSHA Standard 29CFR 1910.1200 and are considered to be trade secrets of L&M Construction Chemicals, Inc.

---

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

BOILING POINT (F): 212  
VAPOR PRESSURE (mm Hg): N/M  
VAPOR DENSITY (AIR = 1): N/M  
SOLUBILITY IN WATER: Miscible  
APPEARANCE: White Liquid  
ODOR: Odorless

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.00  
PERCENT VOLATILE BY VOLUME: N/M  
MELTING POINT: N/Ap  
BULK DENSITY: 8.33#/gal  
PH INFORMATION: 8.5  
Evaporation Rate <1

---

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

HAZARDS FIRES: Slight  
FLASH POINT, °F, (TCC): None  
FLAMMABLE LIMITS - LEL: N/Ap UEL: N/Ap

EXTINGUISHING MEDIA: Use foam, CO<sub>2</sub>, or dry chemical fighting apparatus

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective. Wear full protective clothing including a self-contained breathing apparatus.

---

**SECTION V - REACTIVITY DATA**

STABILITY: unstable:      stable: X  
INCOMPATIBILITY (materials to avoid): None with proper storage.  
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: After a long time small amounts of Ethanol may be formed by hydrolysis.  
HAZARDOUS POLYMERIZATION:    may occur:      will not occur: X  
CONDITIONS TO AVOID: Flame or other sources of ignition

---

**SECTION VI - HEALTH HAZARD DATA****AQUAPEL**

POTENTIAL EFFECTS OF EXPOSURE (listed by primary routes of entry)

INGESTION: No harmful effects have been reported upon ingestion.

INHALATION: No harmful effects have been observed.

SKIN: No harmful effects have been observed.

EYE CONTACT: May produce an oil film causing a brief reversible dimness of sight.

**EMERGENCY & FIRST AID PROCEDURES**

INHALATION: Remove person to fresh air. If breathing is difficult, administer oxygen. Call a physician.

SKIN: If this product comes in contact with the skin, wash with soap and large quantities of water and seek attention if irritation from contact persists.

INGESTION: No harmful effects expected. Contact a doctor if any adverse effects are noticed upon ingestion.

EYE CONTACT: If this product comes in contact with the eyes, flush with large quantities of water for at least 15 minutes and seek immediate medical attention.

CARCINOGENICITY OSHA: No NTP: No IARC: No

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**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small Spill: Absorb liquid on paper, floor absorbent or other material and transfer hood. Large Spill: Eliminate all ignition sources. Persons without protective equipment should be moved from area until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump spill into salvage tank. Pick up remaining in floor absorbent material and shovel into containers. Prevent run-off into sewer, streams or bodies of water.

WASTE DISPOSAL METHOD: Small Spill: Allow volatile portion to evaporate. Destroy remaining by burning in an iron pan. Large Spill: Destroy by liquid incineration. Deposit contaminated absorbent in a landfill in accordance with local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Keep containers cool, dry and away from sources of ignition. Use and store with adequate ventilation. Formation of ethanol by hydrolysis may occur when a storage time of six months will be exceeded.

---

**SECTION VIII - CONTROL MEASURES**

RESPIRATORY PROTECTION: Use mechanical exhaust ventilation where mists or spray may be generated in enclosed areas.

**VENTILATION**

LOCAL EXHAUST: May be required if specified

SPECIAL: Required only in extreme cases

PROTECTIVE GLOVES: Impermeable EYE PROTECTION: Safety glasses, chemical goggles or face shields

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None

WORK/HYGIENIC PRACTICES: Wash hands before breaks and after working.

**END OF MSDS**

# MATERIAL SAFETY DATA SHEET

Prepared according to 29 CFR 1910.1200

DATE PREPARED: September, 1991

DATE REVISED: March, 2001

PAGE 1

MSDS NO: 222

## SECTION I - IDENTIFICATION

L&M CONSTRUCTION CHEMICALS, INC.  
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ASSISTANCE (CHEMTREC) 800-424-9300  
EMERGENCY PHONE NO. 402-453-6600

ID NO.: Non-regulated

PRODUCT

NAME: AQUAPEL PLUS

DOT CLASS: Non-regulated

CHEMICAL

NAME: Alkylalkoxysilane Solution

DOT SHIPPING

NAME: Non-regulated

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Unlisted ingredients are not hazardous per OSHA Standard 29 CFR 1910.1200 and are considered to be trade secrets of L&M Construction Chemicals, Inc.

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (F): 212  
VAPOR PRESSURE (mm Hg): N/A  
VAPOR DENSITY (AIR = 1): N/M  
SOLUBILITY IN WATER: Miscible  
APPEARANCE: White Liquid  
ODOR: Odorless

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.00  
PERCENT VOLATILE BY VOLUME: N/M  
MELTING POINT: N/Ap  
BULK DENSITY: 8.33#/gal  
PH INFORMATION: 8.5  
EVAPORATION RATE: <1

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

HAZARDS FIRES: Slight

FLASH POINT, °F, (TCC): None

FLAMMABLE LIMITS - LEL: N/Ap UEL: N/Ap

EXTINGUISHING MEDIA: Use foam, CO<sub>2</sub>, or dry chemical fighting apparatus

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective. Wear full protective clothing including a self-contained breathing apparatus.

## SECTION V - REACTIVITY DATA

STABILITY: unstable: stable: X

INCOMPATIBILITY (materials to avoid): None with proper storage and handling.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: After a long time small amounts of Ethanol may be formed.

HAZARDOUS POLYMERIZATION: may occur: will not occur: X

CONDITIONS TO AVOID: Flame or other sources of ignition

---

**SECTION VI - HEALTH HAZARD DATA****AQUAPEL PLUS**

POTENTIAL EFFECTS OF EXPOSURE (listed by primary routes of entry)

INGESTION: No harmful effects have been reported upon ingestion.

INHALATION: No harmful effects have been observed.

SKIN: No harmful effects have been observed.

EYE CONTACT: May produce an oil film causing a brief reversible dimness of sight.

**EMERGENCY & FIRST AID PROCEDURES**

INHALATION: If affected, remove person to fresh air. If breathing is difficult, administer oxygen. Call a physician.

SKIN: If this product comes in contact with the skin, wash with soap and large quantities of water and seek attention if irritation from contact persists.

INGESTION: No harmful effects expected. Contact a doctor if any adverse effects are noticed upon ingestion.

EYE CONTACT: If this product comes in contact with the eyes, flush with large quantities of water for at least 15 minutes and seek immediate medical attention.

CARCINOGENICITY OSHA: No NTP: No IARC: No

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small Spill: Absorb liquid on paper, floor absorbent or other material and transfer hood. Large Spill: Eliminate all ignition sources. Persons without protective equipment should be moved from area until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump spill into salvage tank. Pick up remaining in floor absorbent material and shovel into containers. Prevent run-off into sewer, streams or bodies of water.

WASTE DISPOSAL METHOD: Small Spill: Allow volatile portion to evaporate. Destroy remaining by burning in an iron pan. Large Spill: Destroy by liquid incineration. Deposit contaminated absorbent in a landfill in accordance with local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Keep containers cool, dry and away from sources of ignition. Use and store with adequate ventilation.

OTHER PRECAUTIONS: Avoid inhalation of vapors. Avoid personal contact with the product.

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**SECTION VIII - CONTROL MEASURES**

RESPIRATORY PROTECTION: Use mechanical exhaust ventilation where mists or spray may be generated in enclosed areas.

**VENTILATION**

LOCAL EXHAUST: May be required if specified

SPECIAL: Required only in extreme cases

PROTECTIVE GLOVES: Impermeable

EYE PROTECTION: Safety glasses, chemical goggles or face

OTHER

PROTECTIVE CLOTHING OR EQUIPMENT: None

WORK/HYGIENIC PRACTICES: Eye washes and safety showers in work area recommended. Wash hands before breaks and after working.

**END OF MSDS**

# Blok-Lok®

## Clear Water Repellent



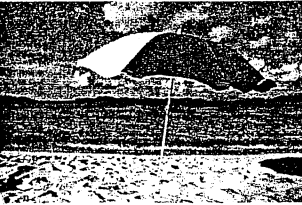
### Technical Data

#### Division 7 Water Repellent

#### CSI Section 7100

#### PRODUCT DESCRIPTION AND USES

Rainguard **BLOK-LOK** with **MICRO-LOK** Clear Water Repellent is a water base, modified polysilane repellent composed of high quality chemical solids, blended to create a clear, deep penetrating and non-film forming chemically reactive masonry water repellent that contains no silicone oils, paraffin wax or urethanes. **MICRO-LOK** creates a



At Rainguard We've Got  
You Covered!

**MICRO-LOK** creates a micro-molecular chemical and mechanical bond between the water repellent chemicals and the substrate. **BLOK-LOK** penetrates deep into porous masonry surfaces to provide long lasting and virtually indestructible water repellent protection that is not affected by weather or sunlight. **BLOK-LOK** is V.O.C. compliant. Helps prevent spalling and cracking caused by freeze thaw cycles. Helps prevent chloride ion intrusion and efflorescence.

**BLOK-LOK** provides superior grade, heavy-duty water repellent performance on a wide variety of porous vertical surfaces such as:

- masonry block
- Concrete
- Stucco
- EFIS or cement plaster
- and may be used on composite construction with a variety of substrates.

**BLOK-LOK** does not alter surface colors or textures. **BLOK-LOK** is maintenance free.

#### HOW TO USE

New masonry and concrete surfaces shall be allowed to cure for 28 days to neutralize alkalinity and release residual moisture. All surfaces to be coated shall be structurally sound, clean and dry free of laitance, accu-

mulated dirt and grime, efflorescence, lime run, form oils and release agents, grease, mud, excess mortar and mold and mildew, etc. When possible use a dry cleaning method such as abrasive blasting, brooming, or high-pressure air to remove surface contaminants. Use high-pressure water if wet cleaning is necessary and allow adequate (3-5 days) drying time to assure uniform penetration of the water repellent. On previously painted surfaces, remove all existing paint or coatings using high-pressure water or abrasive blasting.

All cracks (other than hairline) shall be pointed or caulked. All voids and bee-holes or other masonry surface defects shall be repaired using knife or brush grade elastomeric, urethane or other approved patching. Defective mortar joints shall be routed out, pointed with mortar or caulk and tooled. Seal or caulk all exterior openings such as conduits, pipes drains, door frames, vents, air conditioner openings, electrical openings, control joints or any dissimilar materials using urethane or elastomeric or any approved caulk or sealer. Allowing patching materials and sealers to cure prior to application of **BLOK-LOK**.

**BLOK-LOK** is best and most economically applied using low-pressure commercial airless spray equipment. Equipment shall not atomize material but should flow material on the wall at a minimum rate of 1 to 1½ gallons per minute. Use a tip size of .060 to .110.

Rainguard **BLOK-LOK** is supplied ready to use. **DO NOT THIN.** Avoid application in windy weather. In hot weather, lightly dampen surfaces with clean fresh water to avoid premature drying and a flash cure that may cause a whitish residue. Trigger gun off at the end of each pass to avoid using excessive materials. Stop all applications only at corners, joints, seams or edges. **Never apply more than one coat. DO NOT OVER APPLY.**

**Caution:** Rainguard **BLOK-LOK** will not penetrate through painted or damp surface areas.

#### Applications:

Dense Masonry

Porous Masonry

Vertical Surfaces

Horizontal Surfaces

EFIS Surfaces

#### Features and Benefits:

- Superior grade water repellent protection for porous masonry surfaces
- Exclusive **MICRO-LOK** formulation
- Protection not effected by weathering or UV light
- 1 coat application
- V.O.C. compliant
- Maintenance free
- Breathable - does not trap moisture
- Warranty available

**Porous Masonry Surfaces:** Apply 1 (only) flood coat using low-pressure spray equipment. Start at the top of the wall and work down using overlapping horizontal passes. Spray head should be held 8 to 12 inches from the surface so that the flood coat runs freely down the wall approximately 6-12 inches below the point of application.

**Dense Masonry Surfaces:** Apply 1 (only) saturation coat using low-pressure spray equipment. Start at the top of the wall and work down using overlapping horizontal passes.

Actual coverage rates may vary due to surface porosity.

| <u>Porous Surfaces</u> | <u>Square Feet<br/>Per Gallon</u> |
|------------------------|-----------------------------------|
| Precision Block        | 60-70                             |
| Sandblasted Precision  | 60-70                             |
| Split face Block       | 55-65                             |
| Scored/Fluted Block*   | 55-65*                            |
| Lightweight Block      | 40-55                             |
| Slump Block            | 70-90                             |
| Adobe Block            | 70-90                             |
| Clay Block             | 50-60                             |
| EFIS                   | 80-120                            |
| Concrete               | 80-120                            |

**Notes:** \*Use of fluted or scored block or raked joints will increase surface areas by 20%-30% or more and decrease coverage rates. Allow for this increased surface area when determining material requirements.

- **Test Panel**

Always apply material to a mock wall or test panel, test wall or actual surface area to determine acceptable color, surface porosity, application rates and methods before starting general application. Approve sample surface prior to general application.

## PRECAUTIONS & LIMITATIONS

New masonry and concrete shall be allowed to cure for 28 days prior to application. At time of application, moisture content of all surfaces shall be 15% or less as measured with an electronic moisture meter. Cured masonry shall be allowed four to seven days drying time following a rainfall prior to application. In climates where freezing temperatures have existed prior to application, allow adequate time for surfaces to thaw. In hot weather, lightly dampen surfaces with clean fresh water prior to application to prevent a flash cure of material. Do not apply if ambient air or surface temperatures are below 45° or over 90° F, if temperatures are expected to drop below freezing with 24 hours or if rain is imminent.

**Caution:** Never apply more than one coat. Over application may result in a whitish residue on some surfaces. Do not apply to previously sealed or painted surfaces. Consult manufacturer for application recommendations. **Notes:** Clear water repellents are not designed to waterproof horizontal masonry surfaces such as ledges, sills, cornices and parapet walls, etc. Contact manufacturer for proper treatment recommendations.

## Technical Data

Technical services, specification assistance or information regarding application requirements of this product is available from Rainguard Products Company at (949) 675-2811.

|                         |                                            |
|-------------------------|--------------------------------------------|
| Material Type           | Modified Polysilane                        |
| Active Solids Content   | Approximately 10.0%                        |
| Color of Material       | Clear to Slightly Cloudy                   |
| Odor                    | Slight Ammonia Odor                        |
| Appearance When Dry     | Penetrates Into Substrate-No Surface Film. |
| V.O.C.                  | >40 g/L V.O.C. Compliant                   |
| Flash Point             | Non-Flammable                              |
| pH Value                | Approximately 12.5                         |
| Viscosity               | 9.6 Seconds No. 4 Ford Cup                 |
| Weight                  | Approximately 8.7 lbs./gal.                |
| Surface Dry Time Approx | 1 Hour @ 70° F with 50% .                  |
| Recoat                  | 24 Hours                                   |
| Full Chemical Cure      | 24-36 Hours                                |

## TEST DATA

|                                               |                        |
|-----------------------------------------------|------------------------|
| Wind Driven Rain ASTM E-514-86                | 98.7% Leak Red         |
| Water Pen Fed Spec SS-W-110C                  | 75% Min Req            |
|                                               | 96.8% Leak Red         |
| Chloride Ion Intr Salt Pounding NCHRP No. 244 | Allowed 25% -          |
|                                               | Obtained 13.0%         |
| Water Abs CMU ASTM C140-75                    | 89% Effective          |
| Water Vapor Trans ASTM D-1653                 | 100% Vapor Perm        |
| Water Repellency ASTM C67-80A                 | 97% Effective          |
| Weathering ASTM G-53                          | 2500 Hours - No Change |

## Limited Warranty Information

The information contained herein is offered in good faith and is believed to be accurate. Accordingly, Rainguard International Products Company provides limited warranties for its' products.

For additional information, or to determine warranty options please contact, please contact Rainguard International Products Company.

## Corporate Office

Rainguard International Products Company  
3334 E Coast Hwy, #201  
Corona del Mar CA 92625  
United States of America

Phone: 1-949-675-2811  
Fax: 1-949-675-3450  
Web Site: [www.rainguard.com](http://www.rainguard.com)  
Email: [rainguardinfo@rainguard.com](mailto:rainguardinfo@rainguard.com)



# MATERIAL SAFETY DATA SHEET

PRODUCT NAME: RAINGUARD BLOK-LOK, SUPER, REGULAR  
CONCRETE AND MASONRY WATERPROOFER

MHIS CODE: H F R P  
3 0 0

## SECTION I - MANUFACTURER INFORMATION

MANUFACTURED FOR: RAINGUARD PRODUCTS COMPANY  
ADDRESS: 3334 E. Coast Highway #201 Corona del Mar, CA 92625  
INFORMATION PHONE: (949) 675-2811  
EMERGENCY PHONE: CHEMTREC: (800) 424-9300  
EFFECTIVE DATE: 01/01/03

## SECTION IA - PRODUCT IDENTIFICATION

CHEMICAL FAMILY: Potassium Silconate  
CHEMICAL NAME: Not Applicable  
FORMULA: Not Applicable

## SECTION II - REPORTABLE COMPONENTS/SARA III INFORMATION

| REPORTABLE<br>COMPONENTS | CAS<br>NUMBER | OSHA<br>PEL          | EXPOSURE<br>ACGIH TLV | OTHER<br>LIMITS | VAPOR<br>PRESSURE | WEIGHT<br>PERCENT |
|--------------------------|---------------|----------------------|-----------------------|-----------------|-------------------|-------------------|
| Potassium Hydroxide      | 1310-58-3     | 2 mg/m3<br>(ceiling) | 2 mg/m3<br>(ceiling)  |                 | 23mm Hg @ 68 F.   |                   |

Chemical compounds contained in Section II are confidential and are considered trade secrets. No toxic chemical(s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372 are present in excess of the applicable de minimis concentrations as specified in Section 372.38(a). WARNING: THIS PRODUCT DOES NOT CONTAIN ANY SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE HARM.

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 212 degrees F  
PERCENT VOLATILE (By Weight): Approximately 60%  
SPECIFIC GRAVITY (Water = 1): 1.30  
VAPOR DENSITY (Air =1): Not Determined  
SOLUBILITY IN WATER: 100.0 %  
APPEARANCE & ODOR: Colorless to yellow liquid with mild odor  
EVAPORATION RATE (Ether = 1): Not Determined  
pH: Approximately 13

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Degrees F): Not Applicable  
METHOD USED: Not Applicable  
FLAMMABLE LIMITS IN AIR: LEL: Not Determined UEL: Not Determined

EXTINGUISHING MEDIA:  
Use water spray, dry chemicals or carbon dioxide.

### SPECIAL FIREFIGHTING PROCEDURES

Material is not considered a fire hazard. Use standard fire fighting techniques to extinguish fires involving this material. As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

### UNUSUAL FIRE AND EXPLOSION HAZARDS

None established.

# MATERIAL SAFETY DATA SHEET

## SECTION V - REACTIVITY DATA

### STABILITY

Stable under normal conditions.

### CONDITIONS TO AVOID

May be corrosive to aluminum and steel.

### CHEMICAL REACTIVITY

Incompatible with acids and dispersed metals

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Burning can produce carbon monoxide, carbon dioxide and traces of incompletely burned hydrocarbons.

### HAZARDOUS POLYMERIZATION

Will not occur.

## SECTION VI - HEALTH HAZARD DATA

### INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Inhalation of vapors or mist can cause mild irritation to serious respiratory tract damage and severe pneumonia.

### SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Skin contact can cause burns.

### EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Eye contact can cause burns.

### INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Not expected in industrial use.

### HEALTH HAZARDS (ACUTE AND CHRONIC)

Acute Overexposure: Refer to ingestion routes of exposure.

Chronic Overexposure: Prolonged contact with dilute solutions or dust has a destructive effect on tissue.

### CARCINOGENICITY

NTP Carcinogenic: No

IARC Monographs: No.

OSHA Related: No.

### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

There is no data available which address medical conditions that are generally recognized as being aggravated by exposure to this product.

Pre-existing skin, eye and respiratory disorders, however, may be aggravated by exposure to this product.

## SECTION VII- FIRST AID PROCEDURES

### INHALATION:

If inhaled, remove to fresh air and administer oxygen if breathing is difficult. If breathing has stopped, start artificial respiration at once. Seek immediate medical attention.

### INGESTION

Never give an unconscious person anything to drink. If unconscious, treat for shock. Notify a physician or the nearest poison control center immediately. If conscious, have the person rinse mouth with cold water. Do not induce vomiting (vomiting may occur naturally, but it should be avoided if possible). If unconscious and vomiting, turn the person on his side to avoid choking.

### SKIN CONTACT

Remove excess material from the skin with a waterless skin cleaner. Flush skin with plenty of water and wash exposed areas with soap and water. Remove contaminated clothing and footwear. Seek immediate medical attention. Wash contaminated clothing and footwear before reuse.

### EYES

In case of contact, flush eyes and eyelids with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Seek immediate medical attention.

## MATERIAL SAFETY DATA SHEET

### SECTION VIII - PRECAUTIONS FOR SAFE HANDLING & USE

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. Any person entering either a significant spill area or an unknown concentration of vapor or aerosol should use a positive-pressure, self-contained breathing apparatus or a positive-pressure, supplied-air respirator with escape pack.

Neutralize spills with a mild acid solution (like acetic acid) before attempting clean-up.

Small spills can be handled routinely. Use adequate ventilation and wear a NIOSH-approved respirator with dust, mist and fume filter to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact.

Ventilate confined spaces. Dike and soak up spill with absorbent material such as sand or Fuller's earth. Recover free liquid and absorbent material from spill area and place into an appropriate chemical waste container for proper disposal. Flush spill area with water. Observe all local, state and federal laws and regulations regarding disposal, cleanup, removal or discharge.

#### WASTE DISPOSAL METHOD

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with applicable regulations under the Resource Conservation and Recovery Act (RCRA). Dispose of waste materials and empty containers in accordance with all federal, state and local health, safety and environmental regulations. Empty containers may contain residual material. Do not reuse containers unless properly reconditioned.

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers tightly closed, even when empty. Protect from freezing. Store in a cool, dry, well-ventilated area. Exercise caution to prevent damage to the container. Avoid breathing vapors and mist. Avoid contact with skin and eyes. Keep out of the reach of children.

### SECTION IX - CONTROL MEASURES

#### RESPIRATORY PROTECTION

If used in well ventilated or open areas, use appropriate NIOSH approved dust, mist and fume cartridge respirator equipment. If used in an area without adequate ventilation, employees should be provided with appropriate, approved, air-purifying or supplied-air respirators selected in accordance with NIOSH guidelines.

#### VENTILATION

Local exhaust and mechanical ventilation in confined spaces is recommended to keep airborne vapor concentrations below exposure limits.

#### PROTECTIVE GLOVES

Use solvent resistant gloves (PVA, nitrile, neoprene or fluoroelastomer, etc.) are recommended.

#### EYE PROTECTION

Chemical resistant splash goggles or face shield selected with regard for use condition exposure potential.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Long sleeved clothing selected for use with regard to exposure potential is recommended.

#### WORK/HYGENIC PRACTICES

Wash hands and before eating or smoking.

#### EXPOSURE LIMITS

No exposure limit has been established for this material. Exposure limits for its hazardous components, if any, are listed in Section II on page one.

### SECTION X - REGULATORY INFORMATION

TSCA: This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

RCRA Hazard Class:  
D002

|                                  |                              |
|----------------------------------|------------------------------|
| Proper Shipping Name:            | Potassium hydroxide solution |
| Hazard Class or Division:        | 8                            |
| Packing Group:                   | II                           |
| UN/UA Number:                    | UN 1814                      |
| Label Required:                  | Corrosive                    |
| Hazardous Substance RQ (Name):   | Potassium hydroxide 1000#    |
| Inhalation Hazard (173.3a (b) ): | Not applicable               |

This material or its components are listed on the Canadian Domestic Substance List (DSL).

## MATERIAL SAFETY DATA SHEET

### SECTION X – REGULATORY INFORMATION (con.)

CANADIAN INGREDIENT DISCLOSURE LIST: This material contains the following listed components in quantities greater than the specified weight to weight concentrations: Potassium hydroxide.

CALIFORNIA PROPOSITION 65: This material does not contain any substances known to the State of California to cause cancer or reproductive effects.

MASSACHUSETTS SUBSTANCE LIST: This material contains the following listed components: Potassium hydroxide.

PENNSYLVANIA HAZARDOUS SUBSTANCE LIST: This material contains the following listed components: Potassium hydroxide.

NEW JERSEY R-T-K HAZARDOUS SUBSTANCE LIST: This material contains the following listed components: Potassium hydroxide.

### SECTION XI – DISCLAIMER

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL WHEN USED IN COMBINATION WITH OTHER MATERIALS OR IN ANY PROCESS. THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED, IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY THEMSELVES AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR THEIR OWN PARTICULAR USE. MANUFACTURER DOES NOT ASSUME ANY LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION. NOTHING CONTAINED HEREIN SHALL BE CONSTRUED AS A RECOMMENDATION FOR USE(S) WHICH INFRINGE VALID PATENTS OR AS EXTENDING A LICENSE UNDER VALID PATENTS.



www.sherwin-williams.com



102.35

# ConFlex XL

## TEXTURE HIGH BUILD

## A5-800 SERIES

### CHARACTERISTICS

**ConFlex XL Texture High Build Coating** is an elastomeric coating which 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. This may be applied to a surface with a pH of 6 to 12.

**Color:** Most colors  
**1 coat system, spray applied,**  
**coverage per coat:**

70-80 sq ft/gal

20.0 - 23.0 mils wet; 9.4 - 11.0 mils dry  
**Coverage will vary with the substrate and the texture.**

**Drying Time, @ 77°F, 50% RH:**  
temperature and humidity dependent

Touch: 4 hours

Recoat: 24 hours

**Flash Point:** N/A

**Finish:** 0-10 units @ 85°

**Tinting with Blend-A-Color:**

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

**Vehicle Type:** Acrylic

**A5W800**

**VOC (less exempt solvents):**

94 g/L; 0.79 lb/gal

**Volume Solids:** 49 ± 2%

**Weight Solids:** 60 ± 2%

**Weight per Gallon:** 10.4 lb

### Mildew Resistant

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

### PHYSICAL PROPERTIES

#### Elongation

ASTM-D412 ..... 300%

1 coat, 9.4 mils dft, 7 day cure @ 77°F & 50% RH

#### Freeze - Thaw Resistance

ASTM D2243 ..... Passes

#### Low Temperature Flexibility

ASTM D522 @10°F ..... Passes

#### Tensile Strength

ASTM-D412 ..... 300 PSI

1 coat, 9.4 mils dft, 7 day cure @ 77°F & 50% RH

#### Water Vapor Permeance

ASTM-E96 ..... 22 perms

1 coat, 9.4 mils dft, 7 day cure @ 77°F & 50% RH

#### Wind-Driven Rain Test

TT-C-555B ..... Passes

98 m.p.h. wind velocity Section 4.4.7

These results are based upon tests conducted by or on behalf of The Sherwin-Williams Company and are general indicators of performance only. Application, conditions, dry and cure times, film thickness, and test interpretation can influence the results.

### SPECIFICATIONS

**A minimum total dry film thickness of 12 - 15 mils (excluding texture) and a surface with 10 or less pinholes per square foot is required for a water-proofing system.**

#### Concrete, Stucco

1 ct. Loxon Acrylic Primer

or Loxon Conditioner

1 ct. ConFlex XL High Build (optional)

1 ct. ConFlex XL Texture High Build

#### Concrete Block, CMU, Split-face Block

1 ct. Loxon Surfacer

or Loxon Acrylic Primer

or Loxon Conditioner

1 ct. ConFlex XL High Build

1 ct. ConFlex XL Texture High Build

#### Previously Coated

1 ct. Loxon Conditioner

1 ct. ConFlex XL Texture High Build

### 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 ProClean Professional™ Prep Wash Concentrated Cleaner or other 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 PrepRite ProBlock Primer Sealer.

#### Concrete, Stucco

If needed, pressure clean with a minimum of 2100 psi 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. Scrape and sand existing peeled or checked paint to a sound surface. Sand glossy surfaces dull. Concrete and mortar must be cured at least 7 days at 75°F. On tilt-up and poured-in-place concrete, commercial detergents and sand-blasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Fill bugholes, air pockets, cracks, and other voids with ConSeal Sealant or Patch.



# CONFLEX XL

## TEXTURE HIGH BUILD

### A5-800 SERIES

| SURFACE PREPARATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CAUTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Masonry surfaces must be dry, 15% or less of water, and within a pH range of 6 to 12. If the pH is above 12, prime the surface first with Loxon Primer, Loxon Conditioner, or Loxon Surfacers.</p> <p><b>Sealing and Patching</b>—After cleaning the surface thoroughly, prime any bare surface with Loxon Acrylic Primer or Loxon Conditioner, apply ConSeal Sealant or Patch if needed, allow to dry, then topcoat.</p> <p>To improve the performance consider:</p> <ul style="list-style-type: none"> <li>• Use caution when preparing the substrate to create a uniform surface.</li> <li>• Cracks, crevices, and through-wall openings must be patched using ConSeal Sealant or Patch.</li> <li>• Fill voids and openings around window and doors using ConSeal Sealant or Patch.</li> <li>• Stripe coat all inside and outside corners and edges with 1 coat of ConFlex XL High Build Coating.</li> </ul> | <p>Apply at temperatures between 50°F and 100°F. <b>Do not reduce.</b></p> <p><b>Brush, small areas only</b> - Use a nylon/polyester brush. Avoid over-brushing which causes air bubbles.</p> <p><b>Roller, small areas only</b> - Use a ½" to 1½" nap synthetic roller cover. Avoid rapid rolling which causes bubbling.</p> <p><b>Must be specifically designed for aggregate coatings</b></p> <p><b>Spray</b></p> <p><b>Graco</b> ..... Texspray HP Compact<br/> Pressure ..... 30-35 psi air to the pump<br/> Tips: ..... 3/16" or 1/4"<br/> Reduction ..... none</p> <p><b>Titan</b> ..... Super Tex 6<br/> Pressure ..... 35 psi air to the pump.<br/> Hose ..... 3/4"<br/> Tips ..... 3/16" or 1/4"</p> <p>The substrate and its condition will determine the application procedure. Considerations to minimize pinholes:</p> <ul style="list-style-type: none"> <li>• 2 coat application with overnight drying between coats</li> <li>• Spray application with backrolling</li> <li>• Power rolling</li> </ul> <p><b>CLEANUP INFORMATION</b></p> <p>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.</p> | <p>For exterior use only.<br/> Protect from freezing.<br/> Non-photochemically reactive.<br/> Not for use in areas subject to wear, as the texturing material may wear off of the surface.<br/> Not for use on horizontal surfaces (floors, roofs, decks, etc.) where water will collect.<br/> Not for use on overhead horizontal surfaces (under sides of balconies, soffits, etc.)<br/> Not for use below grade. Will not withstand hydrostatic pressure.</p> <p><b>CAUTIONS</b></p> <p>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. <b>FIRST AID:</b> 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. <b>DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.</b> 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. <b>WARNING:</b> This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. <b>DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.</b><br/> LCE 10/28/01 A5W800 02 00</p> <p>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 Sheet.</p> |



Conflex

## Material Safety Data Sheet

Document Code: Conflex  
Version: 01

Date of Preparation  
August 8, 2001

### Section 1 - Product and Company Identification

#### PRODUCT NAME & NUMBERS

##### ConFlex XL High Build Coating

White A5W401  
Midtone Base A5W402  
Extra White A5W451  
Deep Base A5W453

#### HMIS CODES

Health 1\*  
Flammability 0  
Reactivity 0

##### ConFlex XL Texture High Build Coating

Fine Texture Extra White A5W800  
Fine Texture Deep Base A5W803  
Medium Texture A5W810  
Medium Texture Deep Base A5W813  
Extra Coarse Texture A5W820  
Extra Coarse Texture Deep Base A5W823

#### MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

#### EMERGENCY TELEPHONE NO.

(216) 566-2917

#### INFORMATION TELEPHONE NO.

(216) 566-2902

### Section 2 - Composition/Information on Ingredients

CAS Number Ingredient Name

-----  
Listed products may contain the following ingredients based upon color.

To obtain individual product MSDS or environmental data, call (216) 566-2902.

#### ConFlex XL High Build Coating

29911-28-2 1-(2-Butoxymethylethoxy)-propanol.  
14808-60-7 Quartz  
12001-26-2 Mica  
13463-67-7 Titanium Dioxide.  
1314-13-2 Zinc Oxide  
107-21-1 Ethylene Glycol.  
1332-58-7 Kaolin  
14807-96-6 Talc  
1333-86-4 Carbon Black.

#### ConFlex XL Texture High Build Coating

29911-28-2 1-(2-Butoxymethylethoxy)-propanol.  
14808-60-7 Quartz  
14464-46-1 Cristobalite  
12001-26-2 Mica  
93763-70-3 Perlite  
13463-67-7 Titanium Dioxide.  
1314-13-2 Zinc Oxide  
107-21-1 Ethylene Glycol.  
1332-58-7 Kaolin  
14807-96-6 Talc  
1333-86-4 Carbon Black.

-- Continued --

**Section 2 – Composition/Information on Ingredients (continued)**

| % WT.              | CAS No.    | Ingredient Name                      |     |                 |                           | Vapor Pressure |
|--------------------|------------|--------------------------------------|-----|-----------------|---------------------------|----------------|
| max 2              | 29911-28-2 | 1- (2-Butoxymethylethoxy) -propanol. |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | Not Established |                           | 0.1 mm         |
|                    |            | OSHA                                 | PEL | Not Established |                           |                |
| max 9              | 14808-60-7 | Quartz                               |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 0.05            | mg/m3 as Respirable Dust  |                |
|                    |            | OSHA                                 | PEL | 0.05            | mg/m3 as Respirable Dust  |                |
| max 1              | 14464-46-1 | Cristobalite                         |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 0.05            | mg/m3 as Respirable Dust  |                |
|                    |            | OSHA                                 | PEL | 0.05            | mg/m3 as Respirable Dust  |                |
| max 5              | 12001-26-2 | Mica                                 |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 3               | mg/m3 as Respirable Dust  |                |
|                    |            | OSHA                                 | PEL | 3               | mg/m3 as Respirable Dust  |                |
| max 7              | 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 |                |
| max 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 |                |
| max 2              | 1314-13-2  | Zinc Oxide                           |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 10              | mg/m3 as Dust             |                |
|                    |            | OSHA                                 | PEL | 10              | mg/m3 Total Dust          |                |
|                    |            | OSHA                                 | PEL | 5               | mg/m3 Respirable Fraction |                |
| <3% due to tinting | 107-21-1   | Ethylene Glycol.                     |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 50              | CEILING                   | 0.1 mm         |
|                    |            | OSHA                                 | PEL | 50              | CEILING                   |                |
| <3% due to tinting | 1332-58-7  | Kaolin                               |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 2               | mg/m3 as Respirable Dust  |                |
|                    |            | OSHA                                 | PEL | 10              | mg/m3 Total Dust          |                |
|                    |            | OSHA                                 | PEL | 5               | mg/m3 Respirable Fraction |                |
| <3% due to tinting | 14807-96-6 | Talc                                 |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 2               | mg/m3 as Respirable Dust  |                |
|                    |            | OSHA                                 | PEL | 2               | mg/m3 as Respirable Dust  |                |
| <1% due to tinting | 1333-86-4  | Carbon Black.                        |     |                 |                           |                |
|                    |            | ACGIH                                | TLV | 3.5             | mg/m3                     |                |
|                    |            | OSHA                                 | PEL | 3.5             | mg/m3                     |                |

**Section 3 – Hazards Identification**

## ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

## EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and 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.

- Continued -



## Section 4 – First Aid Measures

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Do not induce vomiting. Get medical attention immediately.

## Section 5 – Fire Fighting Measures

|             |      |      |
|-------------|------|------|
| FLASH POINT | LEL  | UEL  |
| None        | N.A. | N.A. |

FLAMMABILITY CLASSIFICATION - 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.

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 and remove with inert absorbent.

## Section 7 – Handling and Storage

DOL 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 breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

These coatings 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./m<sup>3</sup> (total dust), 3 mg./m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg./m<sup>3</sup> (total dust), 5 mg./m<sup>3</sup> (respirable fraction).

Removing or disturbing old paint from interior or exterior surfaces by sanding, scraping, abrading or other means may produce dust, debris or fumes that contain lead. Exposure to lead dust, debris or fumes may cause brain damage or other adverse health effects, especially in children and pregnant women. Structures built before 1978 should be tested by a licensed inspector prior to removing or disturbing old paint. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

## Section 8 – Exposure Controls/Personal Protection (continued)

### 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                               | 9.8-11.3 lb/gal | EVAPORATION RATE               | Slower than Ether |
| SPECIFIC GRAVITY                             | 1.15-1.35       | VAPOR DENSITY                  | Heavier than Air  |
| BOILING POINT                                | 212-449 °F      | MELTING POINT                  | N.A.              |
| VOLATILE VOLUME                              | 46-55 %         | SOLUBILITY IN WATER            | N.A.              |
| pH                                           | 9.0-9.5         |                                |                   |
| VOLATILE ORGANIC COMPOUNDS (VOC Theoretical) |                 |                                |                   |
|                                              | 0.6-1.0 lb/gal  | Less Federally Exempt Solvents |                   |
|                                              | 0.3-0.5 lb/gal  | 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

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

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.

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.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

### TOXICOLOGY DATA

| CAS No.    | Ingredient Name                      |     |     |                 |
|------------|--------------------------------------|-----|-----|-----------------|
| 29911-28-2 | 1- (2-Butoxymethylethoxy) -propanol. |     |     |                 |
|            | LC50                                 | RAT | 4HR | Not Established |
|            | LD50                                 | RAT |     | Not Established |
| 14808-60-7 | Quartz                               |     |     |                 |
|            | LC50                                 | RAT | 4HR | Not Established |
|            | LD50                                 | RAT |     | Not Established |

- Continued -

## TOXICOLOGY DATA (continued)

| CAS No.           | Ingredient Name          |     |     |                 |
|-------------------|--------------------------|-----|-----|-----------------|
| <b>14464-46-1</b> | <b>Cristobalite</b>      |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>12001-26-2</b> | <b>Mica</b>              |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>93763-70-3</b> | <b>Perlite</b>           |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>13463-67-7</b> | <b>Titanium Dioxide.</b> |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | >7500 mg/kg     |
| <b>1314-13-2</b>  | <b>Zinc Oxide</b>        |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>107-21-1</b>   | <b>Ethylene Glycol.</b>  |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | 4700 mg/kg      |
| <b>1332-58-7</b>  | <b>Kaolin</b>            |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>14807-96-6</b> | <b>Talc</b>              |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | Not Established |
| <b>1333-86-4</b>  | <b>Carbon Black.</b>     |     |     |                 |
|                   | LC50                     | RAT | 4HR | Not Established |
|                   | LD50                     | RAT |     | >15400 mg/kg    |

**Section 12 – Ecological Information**

## ECOTOXICOLOGICAL INFORMATION

No data available.

**Section 13 – Disposal Considerations**

## WASTE DISPOSAL METHOD

Waste from these products 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**

DOT PROPER SHIPPING DESCRIPTION: Paint and Related Materials, NOIBN

IATA/IMDG SHIPPING DESCRIPTION: Paint and Related Materials, NOIBN

**Section 15 – Regulatory Information**

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

| CAS No.  | CHEMICAL/COMPOUND | % by WT | % Element |
|----------|-------------------|---------|-----------|
|          | Zinc Compound.    | max 2   | max 1.2   |
| 107-21-1 | Ethylene Glycol.  | <3%     |           |

CALIFORNIA PROPOSITION 65

WARNING: These products contain a chemical known to the State of California to cause cancer.

TSCA CERTIFICATION

All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

**Section 16 – Other Information**

CANADIAN DISTRIBUTOR: *Sherwin-Williams Canada*  
*180 Brunel Rd.*  
*Mississauga, ON L4Z 1T5*

NOTE: These products have been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products 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.



## PRODUCT DATA SHEET

### *Elastomeric Waterproofing, Clear*

**2571-70**

#### GENERAL INFORMATION

##### **Product Description**

Clear Elastomeric Waterproofing is a clear, flat penetrating elastomeric rubber latex coating having tenacious mechanical and physical properties. It employs a superior new technology to waterproof and protect concrete, wood and masonry substrates, in particular, split-face blocks. It is designed for application over exterior or interior, new or old, above grade, dense or porous concrete, stucco, and masonry surfaces. It protects against the damaging effects of water, de-icing chemicals, freeze-thaw, and acid rain exposure. It accommodates surface movements without altering or changing the surface appearance or texture. It may be tinted with water based colorants and can be added to latex paint or stain.

##### **Performance Characteristics**

- Suitable for both damp or dry surfaces
- Breathable and permeable to water vapor
- May be applied over substrates previously treated with silanes, siloxanes, urethanes and acrylics
- Paintable with latex or oil base paints
- Excellent elongation: 440%
- Excellent tensile strength: 400 psi.
- Excellent exterior durability
- Excellent water resistance
- Low VOC, low odor

##### **Surface Preparation**

The surface should be inspected to identify repairs or improvements necessary before application. All mortar joints should be sealed and joints and cracks larger than hairlines should be filled with a suitable patching material. All preparation, painting, caulking of joints or cracks should be allowed to cure fully prior to application. Alkali, lime, or efflorescence on the surface should be treated or cleaned with a proper neutralizing agent prior to application of the coating. The surface must be clean, dry and free from dirt, wax, grease, oil, chalk, mildew and scaling materials.

##### **Painted Surfaces**

If paint is blistering, remove by abrasive blasting. If the painted surface is in an acceptable and reliable condition, then clean surface with a caustic soda solution 10% diluted with water to enable the coating to bond to

the surface. When using caustic soda or acidic solutions on the surface, hose thoroughly with water and allow to dry before applying coating.

##### **Concrete Surfaces**

Surfaces must be cured at least 30 days and cleaned. For best results, acid-etch with muriatic acid diluted less than 10% with water. Scrub the surface using a stiff brush and allow to stand for 10 minutes on the surface. Hose the surface thoroughly with water.

##### **Application Suggestions**

**STIR WELL BEFORE USING.** Some separation may occur, but it will have no detrimental effect on the performance of the material. Apply by brush, roller, airless spray, or immersion. When spraying, follow spray equipment manufacturer's recommendations carefully. On vertical surfaces, apply Elastomeric Waterproofing from bottom to top using a garden sprayer or airless with 421 Contractor Spray tip, not to exceed 500 psi. May also be applied using a paint pad, foam roller, brush or natural bristle brush. Work small sections at a time. Always apply to a small, inconspicuous test area first to ensure penetration and proper results. Apply in a single, liberal, saturating application so that the surface remains wet for a few seconds before penetrating. Surface pools or puddles should be removed by back-rolling or brooming until Elastomeric Waterproofing completely penetrates the surface. Failure to do so may result in blotching and/or a glistening appearance. Be sure that new wood has aged, particularly when working with redwood, pine, or cedar, as those woods may take 6 to 12 months to suitably dry. Elastomeric Waterproofing will not stop tannic acids from bleeding or the natural discoloration process (silvery-gray) in wood, but continues to waterproof the wood.

Because this product is a penetrating sealer, it can be painted with oil or water based paints or stains. Allow the surface to dry for at least 7 to 14 days prior to painting.

Apply only when the temperature of the surface, material and air is above 50°F. Exterior applications must be protected from rain for at least 4 to 5 hours after application.

**HEALTH & SAFETY INFORMATION****CAUTION!**

Do not take internally. Use only with adequate ventilation. Avoid breathing vapor, spray mist or sanding dust. Sanding dust may cause eye and skin irritation. Avoid contact with eyes. Avoid prolonged or repeated contact with skin.

*This product contains chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm (Prop. 65).*

**Environmental Considerations**

Formulated without lead, mercury or chromium.

**Disposal Information**

Dispose in accordance with all Federal, State and Local regulations. Please use all of the paint before disposing of the container. If no paint can be poured or drained from the container, dispose of the dry, empty container as you would normal household waste. Store any excess product in a tightly sealed container away from heat or flames. To dispose of a full or partially full container of paint, contact your city or county government for hazardous materials collection locations and operating hours. Do not dispose of excess paint in any sanitary or storm water sewer system.

**TECHNICAL INFORMATION****APPLICATION EQUIPMENT**

|                  |                          |
|------------------|--------------------------|
| Brush Type:      | Polyester, Nylon, foam   |
| Roller Cover:    | Synthetic or foam rubber |
| Nap size:        |                          |
| Medium Texture   | 3/8" – 1/2" nap          |
| Spray Equipment: | Heavy-duty piston        |
|                  | 500 PSI maximum          |
| Spray Tip Size:  | 421 Contractor Spray Tip |
| P.S.I.:          | 500                      |
| Filter:          | 60 mesh                  |

**VISCOSITY:** 125 centipoise

**THINNING:** Apply at package consistency. DO NOT THIN

**DRY TIME:** Dries to the touch and may be walked on in 1 to 2 hours depending on surface texture, porosity, temperature and humidity. Sets up an initial barrier in 24 hours. Allow 72 hours before exposing to water under pressure or motor vehicle traffic. Allow to cure for at least one week before exposing to water test.

**CLEAN-UP:** Clean brushes, rollers and equipment with soap and water. Clean spills and spatter immediately.

**COVERAGE:** One coat application will have the following spread rates (ft<sup>2</sup>/gal). Spread rates will vary considerably due to the porosity of the substrate.

|                  |         |
|------------------|---------|
| Split Face Block | 80-100  |
| Regular Block    | 100-120 |
| Rough Concrete   | 120-140 |
| Smooth Concrete  | 140-160 |
| Stucco           | 130-140 |
| Exterior Brick   | 120-140 |
| Aggregate        | 150-170 |
| Smooth Stone     | 150-170 |
| Fencing          | 130-150 |
| Lumber           | 175-200 |
| Decking          | 130-140 |
| Shakes/Shingles  | 130-140 |

**TECHNICAL SPECIFICATIONS**

|                                       |           |
|---------------------------------------|-----------|
| <b>FLASH POINT:</b>                   | None      |
| <b>SOLIDS BY WEIGHT:</b>              | 15%       |
| <b>Density</b>                        | 9.16      |
| <b>Moisture Vapor (ASTM E96)</b>      | Excellent |
| <b>Perm Rating</b>                    | 14.2      |
| <b>Water Permeance (ASTM E514-86)</b> | 99%       |
| <b>Shore A Hardness</b>               | 40        |
| <b>Tensile Strength (ASTM 412)</b>    | 400 psi   |
| <b>Elongation (ASTM 412)</b>          | 440%      |
| <b>Maximum Service Temperature</b>    | 450°F     |

**EQUIVALENT FEDERAL SPECIFICATIONS:** None

Revised 3/2/01



Note: To the best of our knowledge, the information contained herein is accurate. However, Smiland Paint company assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any information or material for the use contemplated, the manner of use and whether there is any infringement of patents is the sole responsibility of the user. Additional information may be obtained thorough your local sales representative or the Morwear sales office

2571-70

## CLEAR, ELASTOMERIC WATERPROOFING

Page: 1

PRODUCT NAME: CLEAR, ELASTOMERIC WATERPROOFING  
PRODUCT CODE: 2571-70

HMIS CODES: H F R P  
2\*0 0 B

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURED FOR : SMILAND PAINT COMPANY  
ADDRESS : 620 LAMAR STREET  
LOS ANGELES, CA. 90031-2513

EMERGENCY PHONE : (800) 535-5053      DATE PRINTED : 01/06/94  
INFORMATION PHONE : (323) 222-7616      NAME OF PREPARER :  
SUPERSEDES DATE :      REVISION DATE : January 6, 1994

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

| REPORTABLE COMPONENTS                                             | CAS NUMBER | VAPOR PRESSURE<br>mm Hg @ TEMP | WEIGHT<br>PERCENT |
|-------------------------------------------------------------------|------------|--------------------------------|-------------------|
| SILICA, AMORPHOUS<br>OSHA TWA: 6mg/m3; ACGIH TWA: 10mg/m3 AS DUST | 7631-86-9  | N/A                            | N/A               |
|                                                                   |            |                                | 3.1               |

\*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| BOILING RANGE: 212-225 F                             | SPECIFIC GRAVITY (H2O=1): 1.24       |
| VAPOR DENSITY: Lighter than air.                     | EVAPORATION RATE: Slower than ether. |
| COATING V.O.C.: 30 g/l                               | MATERIAL V.O.C.: 30 g/l              |
| SOLUBILITY IN WATER: Complete.                       |                                      |
| APPEARANCE AND ODOR: Typical for water based paints. |                                      |

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: Not Applicable.                      METHOD USED: Not Applicable.

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .62 UPPER: 15.3

EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, or Water Fog.

## SPECIAL FIREFIGHTING PROCEDURES

Cool containers with water spray. Firefighters should wear full protective clothing.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed container exposed to high temperatures may explode or burst due to build up of steam pressure.

===== SECTION V - REACTIVITY DATA =====

STABILITY: Stable.  
CONDITIONS TO AVOID  
Excessive heat.

### INCOMPATIBILITY (MATERIALS TO AVOID)

Avoid contact with strong oxidizing agents and acids.

## HAZARDOUS DECOMPOSITION OR BYPRODUCTS

May form toxic materials on thermal decomposition including Carbon Dioxide, Carbon Monoxide, and various hydrocarbons, alkaline liquid, SiO<sub>2</sub> and NaOH.

HAZARDOUS POLYMERIZATION: Will not occur.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Adverse health effects from vapors or spray mists in poorly ventilated areas may include irritation of the mucous membranes of the nose, throat, and respiratory tract and symptoms of headache and nausea.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

EYES: In direct contact, may cause irritation. SKIN: Prolonged and repeated contact with product may cause skin irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Redness, drying of the skin, or other signs of irritation or contact dermatitis.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: May cause irritation to skin and eyes, gastrointestinal irritation, nausea, and vomiting. CHRONIC: Prolonged or repeated exposure above TLV may result in permanent brain and nervous system damage.

CARCINOGENICITY:    NTP CARCINOGEN: No    IARC MONOGRAPHS: No    OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

May be aggravating to some skin and respiratory conditions, and to pre-existing liver and/or kidney disorders.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with large amounts of water for at least 15 minutes. Take to a physician. SKIN: Wash affected areas with soap and water. Remove contaminated clothing. If irritation persists, consult physician. INHALATION: Remove to fresh air. Treat symptomatically. Consult physician. INGESTION: Drink 1 or 2 glasses of water to dilute. DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike, contain, or absorb with inert materials. Transfer to containers for recovery or disposal. Prevent runoff into sewers, streams, or other bodies of water.

WASTE DISPOSAL METHOD

Dispose of in accordance with all local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not expose to extremes in temperature. Avoid exposure to high temperatures. DO NOT ALLOW TO FREEZE.

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. Avoid prolonged or repeated exposure to levels above TLV. KEEP OUT OF REACH OF CHILDREN.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

Not normally required. If TLV is exceeded, use NIOSH/MSHA approved organic



vapor and mist, supplied air, or self-contained breathing apparatus. Avoid breathing sanding dust.

VENTILATION

Use adequate mechanical (general and/or local) ventilation to maintain exposure below TLV.

PROTECTIVE GLOVES

Wear resistant gloves such as polyethylene.

EYE PROTECTION

Use chemical splash goggles or OSHA permitted safety glasses.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Wear impervious clothing. Eye wash station.

WORK/HYGIENIC PRACTICES

Wash hands before eating or using restrooms. Remove and wash all contaminated clothing before reuse.

===== SECTION IX - DISCLAIMER =====

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.

# TK-1311 WB SILANE CONCENTRATE

Meets Federal EPA's VOC Requirements



PRODUCTS

Division of Sierra Corporation

## Technical Data

TK-1311 WB SILANE CONCENTRATE  
Water Repellent Concrete Sealer

PRODUCTS  
3 & 7



### 1. PRODUCT NAME

TK-1311 WATER BASED SILANE  
CONCENTRATE CONCRETE  
SEALER

### 2. MANUFACTURER

TK PRODUCTS, DIVISION OF  
SIERRA CORPORATION  
11400 West 47th Street  
Minnetonka, MN 55343  
952-938-7223  
952-938-8084 (FAX)  
e-mail: tkproduct@AOL.com  
Website: http://www.tkproduct.com

### 3. PRODUCT DESCRIPTION

TK-1311 is a silicone micro emulsion concentrate based on silane and oligomeric alkoxy silanes, which when mixed with water, produce micro emulsions. In diluted form it is used to seal and impart water repellency to absorbent mineral building materials.

### 4. TECHNICAL DATA

TK-1311 has been tested by Wacker Silicones Corporation laboratory according to the NCHRP 244 test procedures. The Series II cube test results are as follows:

| TK-1311     |      |
|-------------|------|
| Percent     | 10   |
| SFPG        | 200  |
| % Reduction | 83.2 |

-A.I.M. Category - Waterproofing Sealer and Treatment - maximum VOC 600 g/l.

-A.I.M. Definition: TK-1311 WB Silane Concentrate is a coating formulated and recommended for application to a porous substrate for the primary purpose of preventing the penetration of water.

### 5. APPLICATION PROCEDURES AND INSTRUCTIONS

#### Preparation:

Substrate to be sealed should be clean and dry.

#### Application:

Prepare emulsion by adding 5 gallons TK-1311 to 45 gallons water in open head agitator drum. Stir for 2 to 3 minutes.

TK-1311 diluted with water should be used on the day on which it has been diluted

#### Coverage:

TK-1311 should be applied uniformly at the rate of 150 square feet per gallon. Coverage rates will vary with surface texture, porosity, weather conditions, etc. A test panel mock-up should be applied prior to project start-up to determine coverage rates and appearance.

#### Limitations:

- Do not apply to wet or frozen substrates.
- Do not apply when ambient air temperature is below 40°F.
- Do not apply when rain or snow are forecast or expected.

#### First Aid:

**Ingestion:** If swallowed, give several glasses of water, but do not induce vomiting. If vomiting does occur, give fluids again; call physician immediately.

**Eye Contact:** Do not rub, flush with clean water for 15 minutes. **Skin Contact:** Remove by washing thoroughly with soap and water. If eye or skin irritation continues, obtain medical assistance.

### 6. AVAILABILITY AND PACKAGING

TK-1311 is packaged in 5 and 1 gallon containers.

### 7. LIMITED WARRANTY

TK Products, a division of The Sierra Corporation, warrants that its products conform to their label descriptions, are free from manufacturing defects, and are fit for the ordinary purposes for which such goods are used. Inasmuch as the use of its products by others and other factors

affecting product performance are beyond TK Products' control, TK Products does not guarantee the results to be obtained. SHOULD ANY OF ITS PRODUCTS FAIL TO GIVE SATISFACTORY RESULTS, TK PRODUCTS WILL REPLACE THE PRODUCTS OR, AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE OF THE PRODUCTS OF TK PRODUCTS TO PERFORM AS WARRANTED AND SHALL ALSO CONSTITUTE LIQUIDATED DAMAGES IN CASE OF LOSS. UNDER NO CIRCUMSTANCES SHALL THE BUYER BE ENTITLED TO ANY OTHER REMEDY OR DAMAGES. REMEDIES FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY EXCLUDED. TK Products does not authorize any person to assume for it any other liability in connection with the sale or use of its products unless specifically authorized by TK Products in writing. See also TK PRODUCTS DISCLAIMER section below.

### 8. TECHNICAL SERVICES

The TK office offers assistance with specifications, performance test data and field services.

### 9. FILING SYSTEMS

Information Handling Services:  
PO Box 1213  
Englewood, CO 80150  
Information Marketing Services:  
13271 Northend  
Oak Park, MI 48237

#### TK DISCLAIMER

Every effort has been made to ensure the accuracy of the above information and to avoid infringement of any patent or copyright. The information is based on field tests by government and private agencies, as well as lab tests, and on technical data from raw material manufacturers. The person(s) specifying or requesting the use of these products is responsible for assuring their suitability for a specific use, as well as the proper application of the products. Where there is any question as to the suitability of a particular product, a small test patch is recommended. See also LIMITED WARRANTY above.

FOR INDUSTRIAL USE ONLY

9/99



PRODUCTS  
3 & 7

TK-1311 WB SILANE CONCENTRATE  
Water Repellent Concrete Sealer

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

SILANE, WB CONCRETE SEALER

Page: 1

MANUFACTURER: SIERRA CORP/TK PRODUCTS  
ADDRESS : 11400 WEST 47TH STREET  
MINNETONKA, MN 55343

EMERGENCY PHONE: 1-800-424-9300  
INFORMATION PHONE: (952) 938-7223

DATE PRINTED : 01/22/2003

NAME OF PREPARER : Safety Director

## ===== SECTION 1 - PRODUCT IDENTIFICATION =====

PRODUCT NAME: SILANE, WB CONCRETE SEALER

HMIS CODES: H F R P

PRODUCT CODE: TK-1311 WB

2\*3 1 H

## ===== SECTION 2 - COMPOSITION/INGREDIENT INFORMATION =====

| COMPONENT                      | CAS NUMBER | WEIGHT  | EXPOSURE LIMITS |           |         |
|--------------------------------|------------|---------|-----------------|-----------|---------|
|                                |            | PERCENT | OSHA PEL        | ACGIH TLV | OTHER   |
| ISOOCYLTTRIMETHOXSILANE        | 34396-03-7 | 40 - 50 | NOT ESTABLISHED |           |         |
| ETHYL SILICATE                 | 78-10-4    | 20 - 30 | 10 PPM          | 10 PPM    |         |
| OLIGOMERIC ALKYLALKOXYSILOXANE | PMN 84-811 | 10-20   | NOT ESTABLISHED |           |         |
| * GLACIAL ACETIC ACID          | 64-19-7    | 1-10    | UNKNOWN         | 10 PPM    | STEL 15 |

\* Chemical(s) that are chronic health hazards. Refer to section 3 for further information.

## ===== SECTION 3 - HEALTH HAZARDS IDENTIFICATION =====

### PRIMARY ROUTES OF EXPOSURE:

Skin contact, eye contact, and inhalation.

### EFFECTS OF ACUTE EXPOSURE:

ES: Contact with eyes may cause irritation including burning, watering, and redness.

SKIN: Contact may cause mild skin irritation including redness, burning, and drying and cracking of skin. Continued exposure may develop into dermatitis. Solvents can penetrate the skin and cause systematic effects similar to those under inhalation symptoms.

INHALATION: High vapor concentrations are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, asthma, drowsiness, unconsciousness, and other central nervous system effects, and possibly death.

INGESTION: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.

### CHRONIC HEALTH EFFECTS:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (Sometimes referred to as Solvent or Painter's Syndrome). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Chronic exposure may also cause damage to the respiratory system, lungs, eyes, skin, gastrointestinal tract, liver, spleen and kidneys. Repeated skin contact may cause persistent irritation or dermatitis.

### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Conditions aggravated by exposure may include skin disorders, respiratory (asthma-like) disorders, and pre-existing liver or kidney conditions.

## ===== SECTION 4 - FIRST AID MEASURES =====

IF ON SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. If irritation develops and persists, seek medical attention.

IF IN EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. If symptoms persist, seek medical attention.

IF SWALLOWED: Do not induce vomiting. Keep person warm, quiet and seek immediate medical attention. Aspiration of material into lungs can cause severe lung damage. VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION: Move affected individual to fresh air. If breathing is difficult, qualified personnel should administer oxygen. If breathing has stopped give artificial respiration. If respiratory symptoms develop or persist, seek medical attention.

## ===== SECTION 5 - FIRE AND EXPLOSION HAZARD DATA =====

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

SILANE, WB CONCRETE SEALER

Page: 2

3H POINT: 69 F

METHOD USED: TCC

MMABLE LIMITS IN AIR BY VOLUME- LOWER: 6.6

UPPER: 19.3

## EXTINGUISHING MEDIA:

Foam, CO2, or dry chemical is recommended. Water spray is recommended to cool or protect exposed materials or structures.

## SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters. Carbon dioxide can displace oxygen, exercise caution when using CO2 in confined areas.

## UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors may be ignited by heat, sparks, flames, or other sources of ignition. Vapors are heavier than air and may travel considerable distances to a source of ignition where they may cause a flashback or explosion. If container is not properly cooled, it can rupture in the presence of excessive heat.

## ===== SECTION 6 - ACCIDENTAL RELEASE MEASURES ===== STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Keep all sources of ignition and hot metal surfaces away from spill/release. Use explosion-proof non-sparking equipment. Stay upwind from area. Isolate danger and keep unauthorized personnel out. Stop source of release if possible with minimal risk. Wear appropriate protective equipment including respiratory protection. Prevent spill from entering sewers, storm drains, or any other unauthorized treatment drainage systems and natural waterways by diking ahead of the spill. Spilled material may be absorbed with an appropriate spill kit. Notify fire authorities and appropriate federal, state, and local agencies if required.

## ===== SECTION 7 - HANDLING AND STORAGE ===== HANDLING INFORMATION:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communication Standard.

en container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to other. Static charge can accumulate by flow or agitation. Ignition can occur by static discharge. The use of explosion proof equipment is recommended and may be required. The use of respiratory protection is advised when concentrations exceed any established exposure limits and in confined spaces. Use good industrial and personal hygiene practice, wash thoroughly after handling, and do not wear contaminated clothing.

## STORAGE INFORMATION:

Keep containers tightly closed. Use and store material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No smoking or open flame" sign. Store only in approved containers. Keep away from incompatible materials (see section 10). Protect containers against physical damage. Indoor storage should meet OSHA standards and appropriate fire codes.

## OTHER PRECAUTIONS:

"Empty" containers retain residue, liquid and vapor, and may be dangerous. Do not cut, weld, pressurize, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause severe personal injury or death. All containers should be disposed of in an environmentally safe manner in accordance with all government regulations.

## ===== SECTION 8 - CONTROL MEASURES/PERSONAL PROTECTION ===== RESPIRATORY PROTECTION:

Engineering or administrative controls should be implemented to reduce exposure. A NIOSH/MSHA approved respirator with an organic vapor cartridge should be used under conditions where airborne concentrations are expected to exceed exposure limits (See Section 2). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

## VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

## PROTECTIVE GLOVES:

event prolonged or repeated contact by wearing gloves impervious to solvents and other appropriate protective thing. Launder contaminated clothing before reuse.

## LE PROTECTION:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

SILANE, WB CONCRETE SEALER

Page: 3

ropriate if splashing is likely. Eye washes must be available where eye contact can occur.

## ER PROTECTIVE CLOTHING OR EQUIPMENT:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

## WORK/HYGIENIC PRACTICES:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidelines.

## ===== SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES =====

PHYSICAL STATE: Liquid

COLOR: Amber/Translucent

ODOR: Hydrocarbon odor

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.

VAPOR DENSITY: Heavier than air.

BOILING RANGE: 244 deg F

EVAPORATION RATE: Faster than nBuAc

% VOLATILE BY WT: 6.0%

COATING V.O.C.: 59 g/l (.5 lb/gal )

% VOLATILE BY VOLUME: 6.02%

## ===== SECTION 10 - STABILITY/REACTIVITY DATA =====

### STABILITY:

Stable under normal conditions and handling.

### CONDITIONS TO AVOID:

All possible sources of ignition.

### INCOMPATIBILITY (MATERIALS TO AVOID):

Avoid exposure to strong oxidizing agents and reducing agents.

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Combustion may liberate toxic byproducts such as carbon dioxide, carbon monoxide, various oxides of carbon and nitrogen.

### HAZARDOUS POLYMERIZATION:

Will not occur.

## ===== SECTION 11 - TOXICOLOGICAL INFORMATION =====

### SENSITIZATION:

None known.

### RCINOGENICITY:

There is no data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

### REPRODUCTIVE TOXICITY:

There is no data available to indicate any components present at greater than 0.1% may present reproductive toxicity.

### TERATOGENICITY (BIRTH DEFECTS):

There is no data available to indicate any components present at greater than 0.1% may cause birth defects.

### MUTAGENICITY:

There is no data to indicate that any component present at greater than 0.1% will alter DNA.

## ===== SECTION 12 - ECOLOGICAL INFORMATION =====

### ENVIRONMENTAL DATA:

Although no information is available for this specific product mixture, individual components may by themselves may have ecological affects.

## ===== SECTION 13 - DISPOSAL CONSIDERATIONS =====

This product is considered a RCRA hazardous waste due to the characteristic(s) of D001 and D018. Waste is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

Container contents should be completely used and containers empty prior to discarding. Container rinsate could be considered a RCRA hazardous waste and must be discarded in compliance with all applicable regulations. Larger empty containers, such as drums, should be returned to a professional drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

## ===== SECTION 14 - REGULATORY INFORMATION =====

### SHIPPING NAME:

Flammable Liquid, N.O.S., 3, (Ethyl silicate, alkyltrialkoxysilane), UN 1993 PACKING GROUP: II

All ingredients of this product are listed, or are excluded from listing, on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

This product does not contain a chemical subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations.

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

SILANE, WB CONCRETE SEALER

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## TE SPECIFIC REQUIREMENTS:

This product does not contain a chemical known to the state of California to cause cancer, birth defects or reproductive harm, subject to the requirements of California Proposition 65.

| STATE LISTED COMPONENTS | CAS NUMBER | STATE CODE                                 |
|-------------------------|------------|--------------------------------------------|
| Ethyl silicate          | 78-10-4    | MA, PA, NJ                                 |
| Acetic Acid             | 64-19-7    | CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, RI |

## DISCLAIMER

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