#### **APPLICATION**

EP-GUARD 1500 Series can be applied by brush, roller, airspray, airless and electrostatic. For all air spray and airless application, please refer to the equipment manufacturer for guidance in achieving proper viscosity.







3.0 to 4.0 mils 1 to 2 coats



# MULTIPLE APPLICATIONS TABLE



Looking for the perfect solution to your painting project? Call us at 1-800-361-6652

# **NOT RECOMMENDED FOR**

- · Aluminum or stainless which are not properly conditioned.
- · In Canada as a: Automotive Primer Surfacer: As an alternative for this purpose, we strongly recommend using the 1420 epoxy or the MC-4390 or the MC-46704 which are VOC compliant for this type of application. Refer to the Rules & regulations section of this document.

In doubt? Contact technical services at 1-800-361-6652 for proper guidance in preparing substrate

DISCLAIMER: All information is given in good faith. Since conditions of use are beyond the manufacturer's controls, all information contained herein is without warranty, implied or otherwise. All technical data and specifications are subject to change. Please consult with your Glass Shield representative for more detailed coating recomme

Revised October 2021

#### **AIRLESS & AIR SPRAY**

| Pump                        | 30 : 1                                    | Spray Gun     | HET           | K3 RP         |
|-----------------------------|---|---------------|---------------|---------------|
| Fluid Hose                  | 3/8" x 100'                               | Fluid Tip     | 1.2 - 1.8 ff* | 1.2 - 1.8 ff* |
|                             | maximum                                   | Air Cap       | #410 / 414    |               |
| Tip Size                    | Tip Size 311, 413, 515, 517 or equivalent | Fluid Line    | 3/8"          | 3/8"          |
| PSI 1200 - 2400 PSI minimum | Pressure Pot                              | 15 - 25 psi   | 40 psi        |               |
|                             | minimum                                   | Atomizing Air | 40 - 65 psi   | 36 psi        |
|                             |   |               |               |               |

\*Depending on application and film thickness

#### **CURING SCHEDULE**

Curing times are based on a 3.0-4.0 mils (75-100 microns). Let the film flash off two hours after application. Higher film thickness, insufficient ventilation or cooler temperature will require a longer curing time and could result in solvent entrapment and premature failure of the film. Excessive humidity levels (85%+) or condensation on the substrate might interfere with the curing process leading to a discoloration and poor film quality. In which case the paint job will have to be redone. The maximum recoat time is 30 days without any additional surface preparation. Contact technical services for recommendations and test results.

| Catalyst      | 161-49C  | 161-80C |
|---------------|----------|---------|
| Between Coats | 10 min.  | 10 min. |
| Dry to Touch  | 3 hours  | 1 hour  |
| To Recoat     | 3 hours  | 1 hour  |
| Hard          | 12 hours | 8 hours |
| Fully Cured   | 7 days   | 7 days  |

#### **DEFINITIONS AND REGULATIONS**

IMPORTANT NOTICE: Canadian VOC regulations do not apply in the same way for automotive applications as for architectural applications.



The permissible VOC contents in grams per liter (g/l) vary considerably according to the types of applications as well as the various forms of activities. For example, the application of coatings is governed by the two regulations listed below, everywhere in Canada, except in manufacturing, marine, railway or military. To easily identify the recommended and VOC compliant Glass Shield products, please visit www.Glass-Shield.com/COV. In this section

you will find two tables showing the maximum VOC content permitted under the Automotive Application Regulations (SOR/2009-197) and the Architectural Applications Regulations (SOR/2009-264). We have designed these interactive and informative tools to help you easily identify the Glass Shield products that are specifically recommended for each book and are fully compliant with applicable standards.

For any additional information about a particular application, contact the technical department at 1-800-361-6652 or contact@glass-shield.com from Monday to Friday between 8:00 and 4:30PM.





\*Conditions may apply: refer to the "Definitions and regulations" or visit our website at ; www.Glass-Shield.com/VOC

# **PRODUCT FEATURES**

- Ideal for use on substrates exposed to potentially damp or wet conditions
- Excellent adhesion on a wide variety of substrates including fiberglass, plastic, steel, concrete, properly prepared stainless steel, properly prepared aluminum
- Creates a water tight barrier which also resists many chemical agents
- Up to 30 days recoat time without the need to be sanded (some conditions apply; please consult the technical support to inquire about the best practices)

# SUGGESTED USE

- · Ideal for water treatment facilities and food processing
- Wide variety of substrates which require an excellent adhesion in severe conditions.
- Ideal for submerged or damp environments
- Steel
- Properly conditionned Stainless Steel grade #304
- Properly prepared aluminium
- Fiberglass
- Plastic
- Concrete
- In the nautical field for marine environment below the water line
- Any basins used for drinking water or wastewater retention
- Automotive applications as per articles 2, 4, 9 and 10 (reference to SOR/2009-197 official document) of the "Definitions and regulations" section of this document.
- Architectural applications as per articles 24, 31, 40, 49 & 50 (reference to SOR/2009-264 official document) of the "Definitions and regulations" section of this document.

# **TECHNICAL DATA**

| Coating Type                    | Two componemt polyamide epoxy   |  |
|---------------------------------|---|--|
| Colour                          | grey, white, red, black, yellow   |  |
| Gloss (ASTM D523)               | 60° +/- 5°  |  |
| Packaging                       | Part A: 2.84L / 11.34L<br>Part B: .946L / 3.78L   |  |
| Shelf Life                      | Part A: 5 years<br>Part B: 2 years  |  |
| Flashpoint (ASTM D93)           | 26° C (79° F)   |  |
| Mixing Ratio                    | 3 : 1 per volume  |  |
| Induction Time                  | GS 161-49C: 20 minutes<br>GS 161-80C: None  |  |
| Hardener and Pot Life           | GS 161-49C: 6 hours<br>GS 161-80C: 3 hours  |  |
| Volatile Organic Compound (VOC) | 2.77 lbs/gal (333 g/l)  |  |
| Solids (ASTM D1644)             | By weight: 70% +/- 5%<br>By volume: 50% +/- 5%  |  |
| Recommended Film Thickness      | 75-100 Microns dry<br>(3.0 - 4.0 mils dry)  |  |
| Theoretical Coverage            | 19.5 m <sup>2</sup> / L at 25 microns dry<br>851 Pi <sup>2</sup> / Gal US at 1 mil +/- 5% |  |
| Application Method              | Brush, roller, conventional airspray and airless  |  |
| Temperature Resitance           | 100°C (212°F) in service  |  |
| Thinner                         | GS UC-500S* - regular<br>GS UC-555S - 0 g/l VOC - fast<br>GS UC-557S - 0 g/l VOC - slow   |  |
| Accelerator                     | Not required when using 161-80C   |  |

<sup>\*</sup>Adding GS UC-500S thinner may increase VOC content over 340g/l; please refer to local VOC regulations regarding the painting work to be done. www.Glass-Shield.com/VOC

#### **CHEMICAL RESISTANCE (spot tests)**

| Specific Test | ASTM  | Results   |
|---------------|-------|-----------|
| Solvent       | D1308 | Very good |
| Acids         | D1308 | Very good |
| Alkali        | D1308 | Very good |
| Oil / Grease  | D1308 | Very good |
| Detergent     | D1308 | Excellent |
| Water         | D1308 | Excellent |

# **PERFORMANCE INFORMATION**

| Specific Test                | ASTM                   | Results                                 |
|------------------------------|------------------------|---|
| Mar Resistance               | D5178                  | 2500 - 2000 grams                       |
| Flexibility (Mandrel)        | D522                   | Pass 1/4 inch                           |
| Impact Resistance: direct    | D2297 / 2294 /<br>G-14 | 80 lbs pi                               |
| Elcometer (pull test)        | D4541                  | >1000 lbs with polyurethane 2800 series |
| Water Resistance (immersion) | D870-97                | Pass                                    |

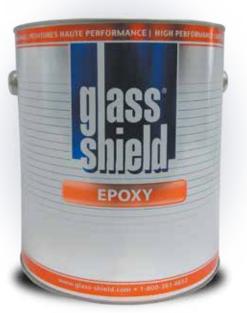
#### **SURFACE PREPARATION**

Prior to the application of EP-Guard 1500 Series, make sure that the substrate is free of dirt, dust, salt deposit, oil, grease, rust, paint and other foreign contaminants. The minimum suggested surface preparation is SSPC-SP-2 or SSPC-SP-3 prescribed by the Steel Structure Painting Council. The recommended standard is SSPC-SP-6 (commercial blast).

For aluminum substrate, surface must be well prepared and primed with a vinyl wash primer; Glass-Shield VINYL-SHIELD 7342 in order to promote proper adhesion.

# **PACKAGING, HANDLING & STORAGE**

| Shipping Weight (approximate) | 1 gallon:<br>11 lbs / 5kg +/- 5% | 4 gallons:<br>44 lbs / 20 kg +/- 5% |
|-------------------------------|----------------------------------|-------------------------------------|
| Storage Indoors               | 10° - 35° C / 50° - 95° F        |                                     |



#### **MIXING AND THINNING**

Mix part A thoroughly, add catalyst Part B (GS 161-49C or GS 161-80C) and mix slowly until homogeneous. If using regular catalyst GS 161-49C, allow a 30 minute induction time before applying the product. If using fast catalyst GS 161-80C, no induction time is needed. Thinning is not usually required, although, if needed, the product may be diluted with Glass-Shield thinners up to a maximum of 5%. The addition of thinner may impact the VOC content. Before adding thinner, refer to local VOC and air quality regulations. If in doubt, consult a Glass Shield technician regarding the VOC limit allowed for the job to be carried out. Any solvent addition must be made after the induction time. Pot life of the mixed material is 6 hours at 77°F (25°C), higher temperatures will reduce the pot life of the product and lower temperatures will have the opposite

CATALYST INDUCTION

 $\prod_{\alpha}$ 





THINNER





VISCOSITY

22 to 38 dry

POT LIFE

# **SALT SPRAY**

161-49C: 30min

161-80C : none

| Specific Test*                       | ASTM | Results    |
|--------------------------------------|------|------------|
| System EP 1500 + polyurethane 2800** | B117 | 2000 hours |

\*All results based on Glass-Guard white polyurethane (2800002)

\*\*All results based on 4 mils of EP-GUARD 1500 and 3 mils of Glass-Guard white polyurethane 2800 series.