




APPLICATION

EP-GUARD 1400 Series can be applied by brush, roller, air spray, airless and electrostatic. For all air spray and airless application, please refer to the equipment manufacturer for guidance in achieving proper viscosity.

PRESSURE	DRY FILM THICKNESS	INTERCOAT
 40 to 65lbs/ 10lbs at the gun Conventional HET or JT1	 3.0 to 4.0 mils 1 to 3 coats	 10 minutes

MULTIPLE APPLICATIONS TABLE



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

NOT RECOMMENDED FOR

- Application over bare aluminum
- Application in continuous immersion in water

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

AIRLESS & AIR SPRAY

Pump	30 : 1	Spray Gun	HET	K3 RP
Fluid Hose	3/8" x 100' maximum	Fluid Tip	1.1 ff	1.1
Tip Size	311, 413, 515, 517 or equivalent	Air Cap	#410 / 414	
PSI	1200 - 2500 PSI minimum	Fluid Line	3/8"	3/8"
		Pressure Pot	15 - 25 psi	40 psi
		Atomizing Air	40 - 65 psi	36 psi

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 recommendations.

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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. Maximum recoat time is 30 days without additional surface preparation. Contact technical services for recommendations and test results. If the maximum recoat time has been exceeded, the surface must be sanded or prepared with a brush off blast SSPC-SP-7 prior to the application of additional coats. EP-GUARD 1400 Series applied below 4°C (40°F) may soften for several hours. This is a normal condition and will not influence performance.

	161-49C	161-80C
Catalyst	161-49C	161-80C
Between Coats	10 min.	10 min.
Dry to Touch	1 hour	30-40 min.
To Recoat	1 hour (up to 7 days)*	30-40 min. (up to 7 days)*
Hard	12 hours	8 hours
Fully Cured	7 days	7 days

*Conditions apply

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.

EP-GUARD™ 1400 series

EPOXY PRIMER FAST DRY



glass shield
HIGH PERFORMANCE COATINGS

Conditions Apply: refer to the Rules & regulations section of this document or visit the website at WWW.Glass-Shield.com/VOC.

PRODUCT FEATURES

- Low V.O.C. <338g/l with catalyst; see thinner*
- Premium adhesion / sanding primer
- Available in various colors: black, white, grey, blue, yellow and red
- Easy to use product. Can be applied with any conventional painting equipments
- Up to 30 days recoat time without the need to be sanded (some precautions are implied; please consult the technical support to inquire about the best practices)

SUGGESTED USE

- Steel structures or equipment (various types)
- Aluminum (vinyl wash primer or AGA 2000 required)
- Wood
- Fiberglass
- Automotive applications as per articles 2, 9 and 10 (reference to SOR/2009-197 official document) of the "Definitions and regulations" section of this document.
- Architectural applications as per article 45 (reference to SOR/2009-264 official document) of the "Definitions and regulations" section of this document.

PACKAGING, HANDLING & STORAGE

Shipping Weight (approximate)	1 gallon: 12 lbs / 5.5kg +/- 5 %	4 gallons: 48 lbs / 22 kg +/- 5 %
Storage Indoors	10° - 35° C / 50° - 95° F	

SALT SPRAY

Specific Test*	ASTM	Results
System EP 1400 + polyurethane 2800**	B117	2000 hours

*All results based on Glass-Guard white polyurethane (2800002)
 **All results based on 4 mils of EP-GUARD 1400 and 3 mils of Glass-Guard white polyurethane 2800 series.

TECHNICAL DATA

Coating Type	Two component polyamide epoxy
Colour	black, white, grey, blue, yellow and red
Gloss (ASTM D523)	60° +/- 5°
Packaging	Part A: 3.78L / 15.12L Part B: .946L / 3.78L
Shelf Life	Part A: 5 years Part B: 2 years
Flashpoint (ASTM D93)	26° C (79° F)
Mixing Ratio	4 : 1 per volume
Induction Time	GS 161-49C: 30 minutes GS 161-80C: None
Hardener and Pot Life	GS 161-49C: 6 hours GS 161-80C: 3 hours
Volatile Organic Compound (VOC)	2.8 lbs / gal (338 g/l)
Solids (ASTM D1644)	By weight: 66% +/- 5% By volume: 46% +/- 5%
Recommended Film Thickness	75-100 Microns dry (3.0 - 4.0 mils dry)
Theoretical Coverage	22 m ² / L at 25 microns dry 883 Pi ² / Gal US at 1 mil +/- 5%
Application Method	Brush, roller, conventional airspray, airless and electrostatic
Temperature Resitance	100°C (212°F) in service
Thinner	GS UC-500S* - regular GS UC-555S - 0 g/l VOC - fast GS UC-557S - 0 g/l VOC - slow
Accelerator	N/A

*The addition of GS UC-500S thinner may increase VOC content above 340g/l; please refer to VOC regulations in effect regarding the paint job to be carried out. www.Glass-Shield.com/VOC

CHEMICAL RESISTANCE (spot tests)

Specific Test	ASTM	Results
Solvent	D1308	Very good
Concentrated HCL	D1308	Very good
Alkali	D1308	Very good
Oil / Grease	D1308	Very good
Detergent	D1308	Excellent

PERFORMANCE INFORMATION

Specific Test	ASTM	Results
Hardness, Pencil Gouge end point (air dry: 25° C, 40% RH)	D3363	4H
Hardness König Pendulum (air dry: 40° C)	D4366	150 seconds
Mar Resistance	D5178	2500 - 2000 grams
Flexibility (Mandrel)	D522	Pass 1/8 inch
Abrasion Resistance	D2486	Very Good
Impact Resistance: direct	D2297 / 2294 / G-14	76 lbs pi
Sag (ready to spray)	D4400	Max. 6 mils 35 dry. Zahn #2
Intercoat Adhesion	D2197 / 3359	4B
Elcometer (pull test)	D4541	>1000 lbs with polyurethane 2800 series






SURFACE PREPARATION

Prior to the application of EP-Guard 1400 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 well prepared and primed with a vinyl wash primer ; Glass-Shield VINYL-SHIELD 7342 in order to promote proper adhesion.

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 effect.

CATALYST	INDUCTION	THINNER	VISCOSITY	POT LIFE
				
4 : 1	161-49C : 30min 161-80C : none	5%	22 to 38 dry	3 to 6 hrs

