




APPLICATION

Glass-Guard 2850 can be applied by brush, roller, airspray, airless and electrostatic. Avoid damp surfaces or high humidity conditions since condensation or fog could settle on the coating before it has cured. Minimum temperature for the application is 10°C (50°F). Temperatures above 30°C or humidity conditions may shorten the dry time of the pot life.

 PRESSURE 40 to 65lbs/ 10lbs at the gun Conventional HET or JTI	 DRY FILM THICKNESS 1.0 to 2.0 mils 1 to 2 coats	 INTERCOAT 15 to 45 minutes
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NOT RECOMMENDED FOR

- Application over bare aluminum
- Application in continuous immersion in water
- Do not apply if humidity level is above 90%

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

MULTIPLE APPLICATIONS TABLE



- TOP COAT CLEAR FINISHES**
 - GLASS-GUARD 2820 SERIE
- TOP COAT COLOR FINISHES**
 - GLASS-GUARD 2800 SERIE
 - GLASS-GUARD 2850 SEMI-GLOSS SERIES
- SURFACER AND BUILDER PRIMERS**
 - EPOXY 1400, 1500 AND 1700 SERIES
 - PRIME-SHIELD MC 4390
 - VINYL-SHIELD 7342
- SUBSTRATE PREPARATION PRODUCTS**
 - GS 9020S
 - A.G.A. 2000
 - GS 202

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

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.

Revised on October 2021

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	309, 411, 513, or equivalent	Air Cap	#410 / 414	
PSI	800 - 2400 PSI minimum	Fluid Line	3/8"	3/8"
		Pressure Pot	15 - 25 psi	40 psi
		Atomizing Air	50 - 60 psi	36 psi

CURING SCHEDULE

Dry times are based on a 2.0 mils (50 microns). Let the film flash off two hours after application. Film thickness over 2 mils dry per coat, insufficient ventilation or cooler temperature will require longer dry time and could result in solvent entrapment and premature failure of the film. Excessive humidity levels or condensation on the substrate during the dry time might interfere with the process leading to discoloration and poor film quality. Maximum recoat time is 72 hours without special 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. Glass-Guard 2800 applied below 4°C (40°F) may soften for several hours. This is a normal condition and will not influence performance.

Intercoat	15-45 minutes
Dry to Touch	40 minutes
To Recoat	3-6 hours
Hard	8 hours
Fully Cure	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

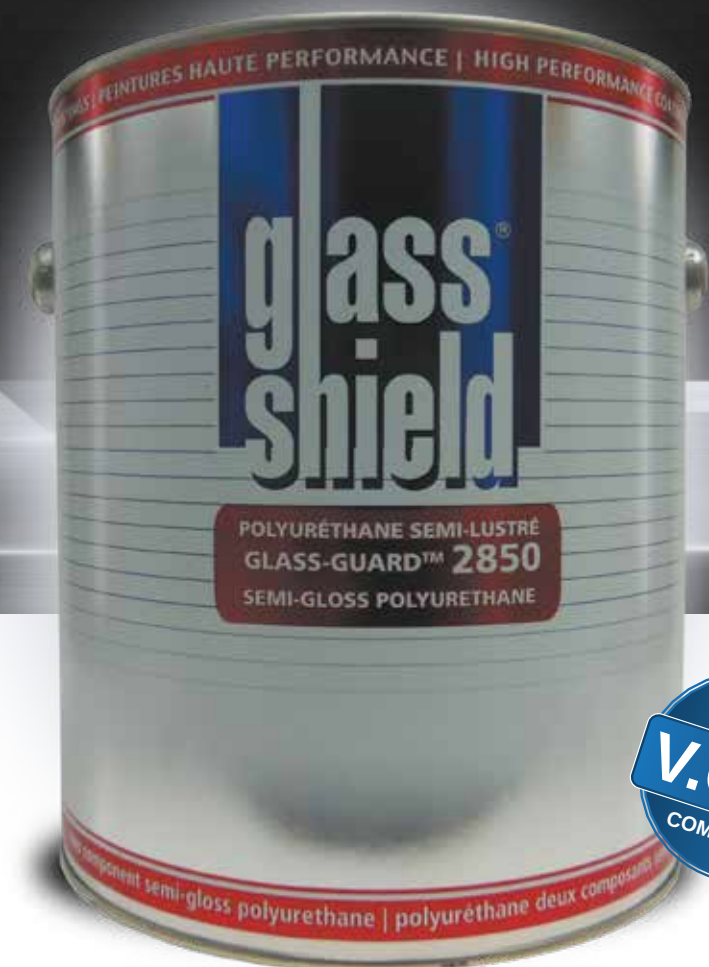
you will find two tables showing the maximum VOC content permitted under the Automotive Application Regulations (SOR/2009-197) and the Architectural Applications Regulations (SOR/2009-264). We have designed these interactive and informative tools to help you easily identify the Glass Shield products 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.



GLASS-GUARD™ 2850 series

POLYURETHANE HIGH PERFORMANCE SEMI-GLOSS



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

PRODUCT FEATURES

- Excellent gloss and color retention when exposed to damaging U.V. rays
- Remarkable chemical impact and abrasion resistant topcoat
- Tough finish coat that can be easily cleaned
- Good application characteristics with any painting equipment

SUGGESTED USE

- Trucks and fleets
- Trains and railcars
- Doors and windows
- Bridges
- Storage tanks
- Pipelines
- Military equipment
- Water treatment plants
- Refineries
- Any substrate (wood, aluminum, fiberglass, galvanized metal, steel, concrete) exposed to moderate or severe corrosive or abrasive environments.
- Automotive applications as per articles 5, 6 and 10 (reference to SOR/2009-197 official document) of the "Definitions and regulations" section of this document.
- Architectural applications as per articles 21 and 50 (reference to SOR/2009-264 official document) of the "Definitions and regulations" section of this document.

SALT SPRAY

Specific Test*	ASTM	Results
System EP 1500 + polyurethane 2850**	B117	2000 hours
System MC-4390 + polyurethane 2850***	B117	5000 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 polyurethane 2850 series.

***All results based on 4 mils of Mc-4390 and 3 mils of Glass-Guard polyurethane 2850 series.

TECHNICAL DATA

Coating Type	Aliphatic polyurethane resins
Colour	Wide range of colors
Gloss (ASTM D523)	50°
Packaging	Part A: 2.84L Part B: .946L
Shelf Life	Part A: 5 years Part B: 2 years
Flashpoint (ASTM D93)	26° C (79° F)
Mixing Ratio	3 : 1 per volume
Induction Time	None
Hardener and Pot Life	GS 275-55C : 6 hours
Volatile Organic Compound (VOC)	3.16 to 3.41 lbs/gal (380 to 410 g/l)
Solids (ASTM D1644)	By weight: 65% +/- 5% By volume: 45% +/- 5%
Recommended Film Thickness	25-37.5 Microns dry (1.0 - 1.5 mils dry)
Theoretical Coverage	17.5 m ² / L at 25 microns dry 640 - 800 Pi ² / Gal US at 1 mil +/- 5%
Application Method	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 GS 262-17S* - slow
Accelerator	None

*Adding GS UC-500S or GS 262-17S thinner may increase VOC content over 420 g/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
Hardness, Pencil Gouge end point (air dry: 25° C, 40% RH)	D3363	4H
Hardness König Pendulum (air dry: 40° C)	D4366	150 seconds
Flexibility (Mandrel)	D522	Pass 1/8 inch
Impact Resistance: direct	D2297 / 2294 / G-14	76 lbs pi
Elcometer (pull test)	D4541	>1000 lbs with polyurethane 2800 series
Smoke Density	E662-01	Pass
Specular Gloss	D4523	Excellent > 90%
Direct weathering inland Florida USA 5 deg. South exposure time : 2 years	D4141 Procedure A	Gloss : E= 2 Deg. Original: 96% - Final (washed): 94% Color Shift: Ecmc= 2.1
Flame Test	FAR 25.853 (BSS 723OFS)	Pass

SURFACE PREPARATION

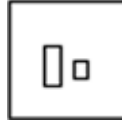



Prior to the application of GLASS-GUARD 2850, make sure that the substrate is clean, dry, free of dirt, dust, deposit, oil, grease and other contaminants of any nature to ensure optimum adhesion. Apply over appropriate undercoat. In doubt, contact technical services at 1-800-361-6652 for proper guidance in preparing substrate.

MIXING AND THINNING

Mix part A thoroughly in order to obtain an homogeneous component. Add catalyst Part B (GS 275-50C, GS275-59C, GS 275-80C) and mix slowly until homogeneous. No induction time is required. Thinning is not usually required, although, if needed, the product may be diluted with Glass-Shield GS UC-500S, GS UC-555S, GS UC-557S or GS 262-17S up to a maximum of 5%. Thinner may also be added depending on local VOC and air quality regulations. 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 reverse effect.

Note: Dry time will vary depending on the catalyst and the addition of paint accelerator.

WARNING: The addition of more than 5% of GS UC-500S or GS 262-17S thinner will increase VOC content above the allowed limit for automotive applications.

CATALYST	THINNER	VISCOSITY	POT LIFE
			
3 : 1	up to 5 %	22 to 60 dry	up to 6 hrs

PACKAGING, HANDLING & STORAGE

Shipping Weight (approximate)	1 gallon: 7.0 lbs / 3.25 kg +/- 5%
Storage Indoors	10° - 35° C / 50° - 95° F

