

INTER-SHIELD™ MC 46704

POLYURETHANE
MOISTURE CURED



HIGH
PERFORMANCE
COATINGS

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

www.glass-shield.com
1-800-361-6652

PRODUCT FEATURES

- Aluminum pigmented, single component moisture cured polyurethane primer
- Can be applied and cured at temperatures below freezing (-4°C)
- Can dry at very low temperatures (as low as -4°C)
- Excellent adhesion, abrasion and chemical resistance
- Excellent intercoat adhesion with subsequent coatings
- Low V.O.C.
- Can be applied in damp and humid conditions. No dew point restrictions
- High build primer

SUGGESTED USE

- Recommended for any steel structures exposed to heavy duty service in corrosive environments
- Super structures
- Machinery
- Automotive applications as per articles 1, 9 and 13 (reference to SOR/2009-197 official document) of the "Definitions and regulations" section of this document.
- Architectural applications as per articles 1 and 3 (reference to SOR/2009-264 official document) of the "Definitions and regulations" section of this document.

SALT SPRAY

Specific Test*	ASTM	Results
System MC-46704 + polyurethane 2800**	B117	5000 hours

*All results based on Glass-Guard white polyurethane (2800002)
All results based on 4 mils of MC-46704 and 3 mils of Glass-Guard white polyurethane 2800 series.

TECHNICAL DATA

Coating Type	Single component moisture cure urethane
Colour	Aluminum grey
Gloss (ASTM D523)	20° +/- 5°
Packaging	3.78L
Shelf Life	1 year
Flashpoint (ASTM D93)	24° C (79° F)
Mixing Ratio	None
Induction Time	None
Hardener and Pot Life	4-6 hours
Elemental Metallic Pigments Contents	86 g/l
Volatile Organic Compound (LOW VOC)	2.06 lbs / US gal (248 g/l)
Solids (ASTM D1644)	By weight: 65% +/- 2% By volume: 55% +/- 2%
Recommended Film Thickness	75-100 Microns dry (3.0 - 4.0 mils dry) For severe conditions: 125-150 Microns dry (5.0-6.0 dry mils)
Theoretical Coverage	22 m ² / L at 25 microns dry 883 Pi ² / Gal US at 1 mil +/- 2%
Application Method	Brush, roller, conventional airspray, airless, HVLP and electrostatic
Temperature Resistance	100°C (212°F) in service
Thinner	GS UC-500S - regular GS UC-555S - low VOC fast GS UC-557S - low VOC slow
Accelerator	N/A

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

APPLICATION

INTER-SHIELD MC 46704 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.

For HVLP application, please refer to your spray equipment manufacturer for recommendations on choosing the right tip size.

PRESSURE



40 to 65lbs/ 10lbs at the gun
Conventional HET or JTJ

DRY FILM THICKNESS



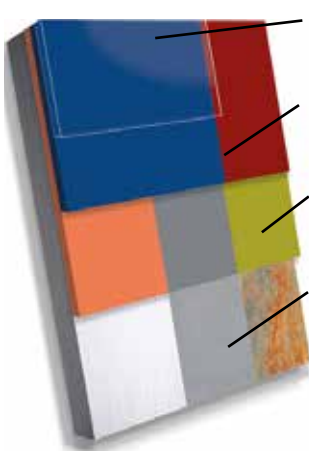
3.0 to 4.0 mils
1 to 3 coats

INTERCOAT



aprox. 20 minutes

MULTIPLE APPLICATIONS TABLE



TOP COAT CLEAR FINISHES

- GLASS-GUARD 2820 SERIE
- MONOGLASS MC 4250

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

NOT RECOMMENDED FOR

- Non ferrous substrates
- Continuous immersion

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 recommendations.

Revised in April 2019

AIRLESS & AIR SPRAY

Manufacturer	Graco
Pump	30 : 1
Fluid Hose	3/8" x 100' maximum
Tip Size	513 or 515
PSI	2400 PSI minimum

Manufacturer	Devilbiss	SATA
Spray Gun	HET	K3 RP
Fluid Tip	1.4-1.6 ff	1.4-1.6
Air Cap	#410 / 414	
Fluid Line	3/8"	3/8"
Pressure Pot	15 - 25 psi	40 psi
Atomizing Air	40 - 65 psi	36 psi

CURING SCHEDULE

Curing times are based on a dry film thickness of 2.0-3.0 mils (75-100 microns). Let the film flash off 2 hours after the final coat. Excessive film thickness, insufficient air movement or a very cold environment will generate longer curing times and can affect the performances of the product. Excessive humidity levels or condensation on the substrate may interfere with the curing process leading to a discoloration and poor film quality. In that case the paint job will have to be redone. Maximum recoat time is 12 hours without any 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 INTER-SHIELD MC 46704 applied below 4°C (40°F) may soften for several hours. This is a normal condition and will not influence performance.

Intercoat	20 minutes (varies depending on humidity level)
Dry to Touch	1 hour
To Recoat	3-6 hours (sanding required after 12hrs)
Hard	8-12 hours
Fully Cured	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.

PERFORMANCE INFORMATION

Specific Test	ASTM	Results
Impact Resistance: direct	D2794	76 lbs pi
Sag (ready to spray)	D4400	25 mils / 22 sec. Zahn #2
Viscosity	D4212	28 sec. Zahn #2
Intercoat Adhesion	D2197 / 3359	4B
Elcometer (pull test)	D4541	>800 lbs with polyurethane 2800 series

SURFACE PREPARATION

Prior to the application of PRIME-SHIELD MC 46704, make sure that the substrate is clean, dry, free of dirt, dust, salt deposit, oil, grease and other contaminants in order to ensure optimum adhesion. Apply over appropriate undercoat. The minimum commercial recommended surface preparation is SSPC-SP-2 or SSPC-SP-3 prescribed by the Steel Structure Painting Council. The suggested standard is SSPC-SP-6. In doubt, contact technical services at 1-800-361-6652 for proper guidance in preparing substrate.

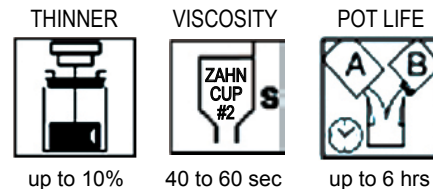
PACKAGING, HANDLING & STORAGE

Shipping Weight (approximate)	1 gallon: 9.15 lbs / 4.15kg
Storage Indoors	10° - 35° C / 50° - 95° F



MIXING AND THINNING

INTER-SHIELD MC 46704 is a single component hygro-reactive primer; it does not require the addition of any catalyst. It is important to mix the primer well, either manually or mechanically, to ensure a good dispersion of the pigmentation; otherwise the performance of the product could be affected. Dilution with a thinner is not necessary (especially with airless equipment). Depending on local VOC, air quality regulations and spray equipment, up to 10% of UC-500S thinner may be added. The addition of thinner can only be done after the product has been mixed well. Pot life of the product is 6 hours at 25°C (77° F). Higher temperatures will shorten the pot life and colder temperatures will have the reversed effect.



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