$\begin{array}{c} \text{AMBER-SHIELD}^{\text{\tiny{M}}} \\ \text{MC} \ 4509 \end{array}$ 

GLASSSHIELD
HIGH PERFORMANCE COATINGS

# $\begin{array}{c} \text{AMBER-SHIELD}^{\text{\tiny{M}}} \\ \text{MC} \, 4509 \end{array}$

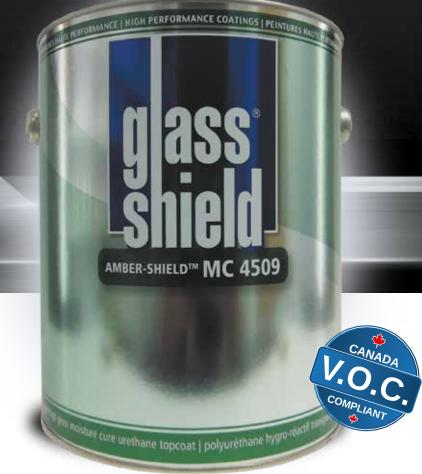
# POLYURETHANE

MOISTURE CURED

CLEAR AMBER / LOW VOC / CHEMICAL RESISTANT







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

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

# **PRODUCT FEATURES**

- Low V.O.C. (180 g/l)
- · Remarkable hardness, impact and chemical resistance
- Very good chemical and solvent resistance
- Excellent protection as industrial steel tank lining
- Can be applied in damp conditions
- Excellent adhesion
- Very good curing times
- · Excellent performance in continuous immersion

## SUGGESTED USE

- Steel tank lining applications
- · Salt spreader boxes, hopper cars or any steel structure to be lined
- Anti-fowling coating in nautical applications
- Automotive applications as per articles 12 and 13 (reference to SOR/2009-197 official document) of the "Definitions and regulations" section of this document.
- Architectural applications as per article 11 (reference) to SOR/2009-264 official document) of the "Definitions and regulations" section of this document.

### **MULTIPLE APPLICATIONS TABLE**



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

### **TECHNICAL DATA**

Coating Type	Aromatic polyurethane resins one compoment	
Colour	Clear (amber)	
Gloss (ASTM D523)	90°+	
Packaging	Part A @ 2.84L Part B @ 0.946L	
Shelf Life	1 year	
Flashpoint (ASTM D93)	26° C (79° F)	
Mixing Ratio	3:1	
Induction Time	None	
Pot Life	4-6 hours	
Volatile Organic Compound (VOC)	1.4 lbs / US gal (180 g/l)	
Solids (ASTM D1644)	By weight: 53% +/- 2% By volume: 46% +/- 2%	
Recommended Film Thickness	37-50 Microns dry (1.5 - 2.0 mils dry)	
Theoretical Coverage	18 m <sup>2</sup> / L at 25 microns dry 740 Pi <sup>2</sup> / Gal US at 1 mil +/- 2%	
Application Method	Brush, roller, conventional airspray, airless and electrostatic	
Temperature Resitance	100°C (212°F) in service	
Thinner	Not recommended	
Accelerator	None	

### **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.

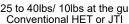
For any additional information about a particular application, contact the technical department at 1-800-361-6652 or contact@glass-shield.com from Monday to Friday between 8:00 and 4:30PM.

### **APPLICATION**

AMBER- SHIELD MC 4509 can be applied by brush, roller and air spray. For all air spray and airless application, please refer to the equipment manufacturer for guidance in achieving proper viscosity.

Do not apply AMBER- SHIELD MC 4509 on wet surfaces or in high humidity conditions since condensation could form on the substrate before it has time to harden. High temperatures or humidity level will cause a shorter cure time.





DRY FILM THICKNESS



1.5 to 2.0 mils 1 to 2 coats



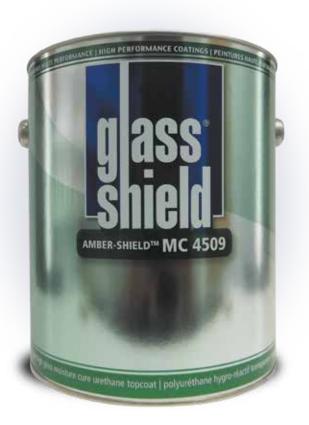
aprox. 20 minutes

### SURFACE PREPARATION

Prior to the application of AMBER-SHIELD MC 4509, 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. In doubt, contact technical services at 1-800-361-6652 for proper guidance in preparing substrate.

### PACKAGING, HANDLING & STORAGE

Shipping Weight (approximate)	1 gallon: 12 lbs / 5.5kg
Storage Indoors	10° - 35° C / 50° - 95° F



### MIXING AND THINNING

AMBER SHIELD MC4509 is a two component amber clear topocoat. Slowly mix Part B into Part A at a 3:1 mix ratio for two to three minutes at slow speed. Once both parts are mixed, pot life should last 4-6 hours depending on humidity conditions. 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.

### POT LIFE



### **CURING SCHEDULE**

Curing times are based on a dry film thickness of 1.5-2.0 mils (37-50 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 might 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 10 hours without any additional surface preparation. 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. AMBER-SHIELD MC 4509 applied below 4°C (40°F) may soften for several hours. This is a normal condition and will not influence performance. Contact technical services for recommendations and test results.

Intercoat	20 minutes (varies depending on humidity level)	
Dry to Touch	2 hours	
To Recoat	2-4 hours (sanding required after 10hrs)	
Hard	4-6 hours	
Fully Cured	7 days	

### **AIR SPRAY**

Manufacturer	Devilbiss	SATA
Spray Gun	HET	K3 RP
Fluid Tip	1.1-1.3 ff	1.1-1.3
Air Cap	#410 / 414	
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

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AMBER-SHIELD ™ **MOISTURE CURED**