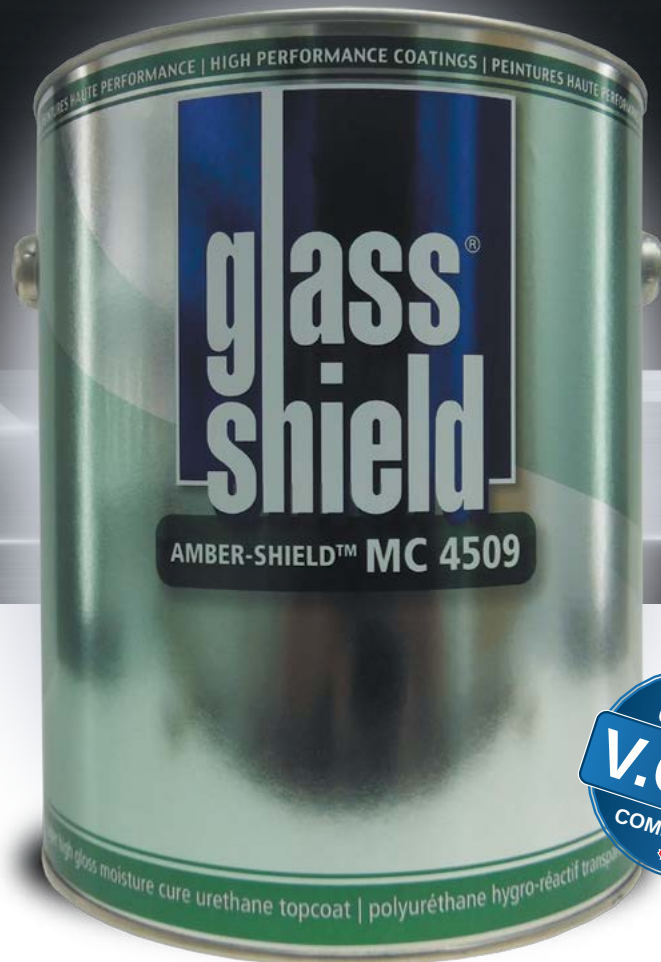


# AMBER-SHIELD™ MC 4509

POLYURETHANE  
MOISTURE CURED

CLEAR AMBER / LOW VOC / CHEMICAL RESISTANT



HIGH  
PERFORMANCE  
COATINGS

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

[www.glass-shield.com](http://www.glass-shield.com)  
1-800-361-6652

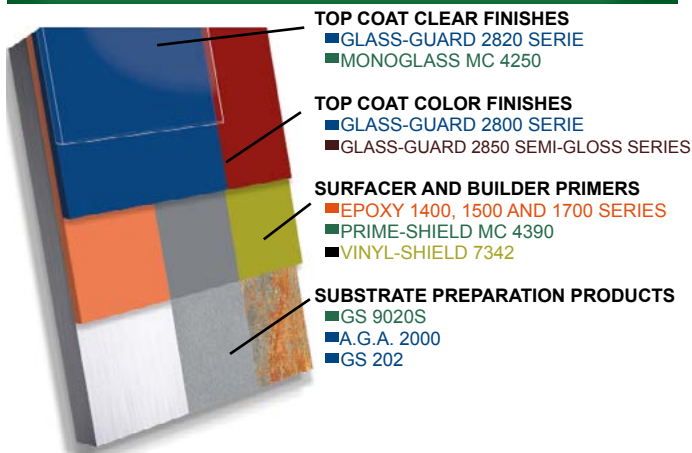
## PRODUCT FEATURES

- Low V.O.C. (217 g/l)
- High gloss, single component moisture cured aromatic polyurethane topcoat
- Remarkable hardness, impact and chemical resistance
- Very good chemical and solvent resistance
- Excellent adhesion
- Anti-graffiti properties
- 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

<b>Coating Type</b>	Aromatic polyurethane resins one component
<b>Colour</b>	Clear (amber)
<b>Gloss (ASTM D523)</b>	90°+
<b>Packaging</b>	Part A @ 2.84L Part B @ 0.946L
<b>Shelf Life</b>	1 year
<b>Flashpoint (ASTM D93)</b>	26° C (79° F)
<b>Mixing Ratio</b>	3:1
<b>Induction Time</b>	None
<b>Pot Life</b>	4-6 hours
<b>Volatile Organic Compound (VOC)</b>	1.8 lbs / US gal (217 g/l)
<b>Solids (ASTM D1644)</b>	By weight: 53% +/- 2% By volume: 46% +/- 2%
<b>Recommended Film Thickness</b>	25-75 Microns dry (1.0 - 3.0 mils dry)
<b>Theoretical Coverage</b>	18 m <sup>2</sup> / L at 25 microns dry 740 Pi <sup>2</sup> / Gal US at 1 mil +/- 2%
<b>Application Method</b>	Brush, roller, conventional airspray, airless, HVLP and electrostatic
<b>Temperature Resistance</b>	100°C (212°F) in service
<b>Thinner</b>	Not recommended
<b>Accelerator</b>	N/A

## DEFINITIONS AND REGULATIONS

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



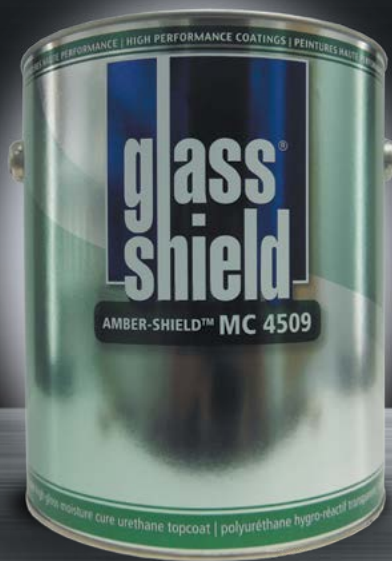
The permissible VOC contents in grams per liter (g/l) vary considerably according to the types of applications as well as the various forms of activities. For example, the application of coatings is governed by the two regulations listed below, everywhere in Canada, except in manufacturing, marine, railway or military. To easily identify the recommended and VOC compliant Glass Shield products, please visit [www.Glass-Shield.com/COV](http://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](mailto:contact@glass-shield.com) from Monday to Friday between 8:00 and 4:30PM.**

# AMBER-SHIELD™ MC 4509

GLASS SHIELD  
HIGH PERFORMANCE COATINGS



[www.glass-shield.com](http://www.glass-shield.com)  
1-800-361-6652

## APPLICATION

AMBER-SHIELD MC 4509 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 JTI

### DRY FILM THICKNESS



1.0 to 3.0 mils  
1 to 2 coats

### INTERCOAT



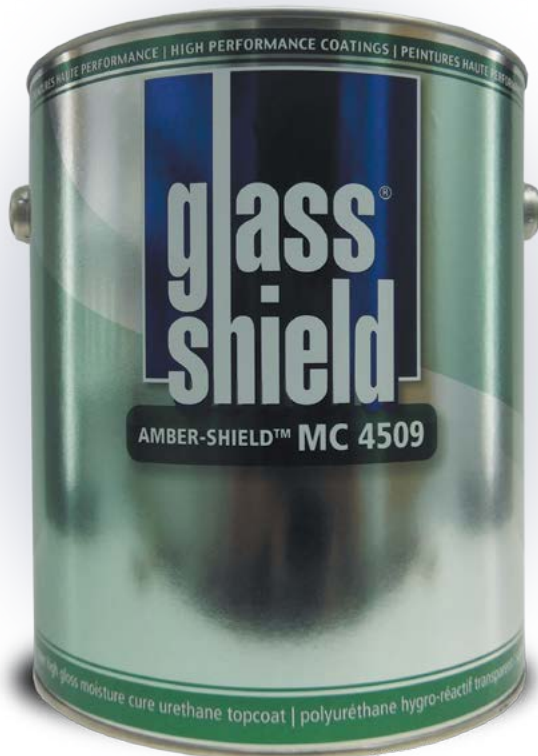
aprox. 20 minutes

## 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

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



## MIXING AND THINNING

AMBER SHIELD MC4509 is a two component amber clear topcoat. 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.

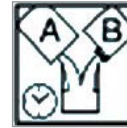
The addition of solvent is not recommended. Depending on local VOC and air quality regulations, up to 10% of UC-500S thinner may be added. The addition of thinner can only be done after the product has been mixed well. Pot life of the product is 6 hours at 25°C (77°F). Higher temperatures will shorten the pot life and colder temperatures will have the reversed effect.

### THINNER



up to 10%

### POT LIFE



4 to 6 hrs

## CURING SCHEDULE

Curing times are based on a dry film thickness of 1.0-3.0 mils (25-75 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

## AIRLESS & AIR SPRAY

Manufacturer	Graco	Manufacturer	Devilbiss	SATA
Pump	30 : 1	Spray Gun	HET	K3 RP
Fluid Hose	3/8" x 100' maximum	Fluid Tip	1.4-1.6 ff	1.4-1.6
Tip Size	509 or 511	Air Cap	#410 / 414	
PSI	2400 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.

Revised in April 2019

www.glass-shield.com  
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**MC-4509**  
MOISTURE CURED