

AMBER-SHIELD™ MC 4509

MOISTURE CURE URETHANE AMBER-CLEAR TOP COAT



PRODUCT FEATURES

- High gloss, single component moisture cure aromatic polyurethane topcoat
- Remarkable hardness and impact resistance
- Very good chemical and solvent resistance
- Outstanding adhesion
- Exceptional protective coating for steel tank lining or interior concrete floors
- Single component product
- Easy to apply with any traditional painting equipment
- Very good curing times
- Can be applied in damp or humid conditions



Suggested Use

- Steel tank lining applications
- Salt spreaders, hopper cars or any steel structure to be lined
- Interior concrete floors

Packaging, Handling & Storage

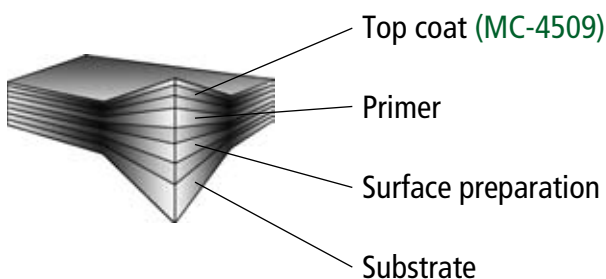
Shipping weight (approximate)	1 gallon: 8.32 lbs (3.774 kg)
Storage (general)	Store indoors
Storage temperature & humidity	40-100 °F (4-43 °C) 0-100% relative humidity
Shelf life	1 year at 75° F (24° C)

Technical Data

Coating type	Single component moisture cure urethane
Colour	Amber
Packaging	3.78 L (1 gallon)
Mixing Ratio	Single component
Gloss	90%
Flashpoint (ASTM D93)	-4° C (25° F)
Thinner	GS UC 500S
Pot life	4 to 6 hours
Shelf life	1 year
Density (ASTM D 1475)	1.00 kg / L +/- 0.05
Weight	8.32 +/- 0.11 lbs / US gal.
Volatile organic compound (VOC)	3.9 lbs / US gal. (464 g/L)

Temperature resistance	100° C (212° F) in continuous service
Solids (ASTM D1644)	
By weight	53 +/- 2%
By volume	46 +/- 2%
Theoretical spreading rate	18 sq.m / l at 25 microns dry
	735 sq.ft. / US gal at 1 mil
Recommended film thickness	50 microns dry (2.0 dry mils)
Application methods	Conventional air spray, brush, roller, airless and HVLP

Typical Sequence



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

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Surface Preparation

The surface preparation recommended for AMBER-SHIELD™ MC 4509 is to include removal of all oil, grease, dirt, dust, mill scale, rust, paint, loose and other foreign matters.

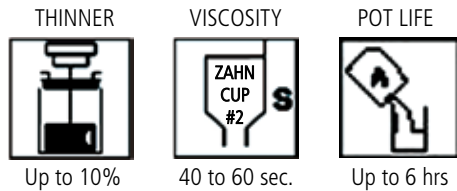
For concrete: Surface must be clean and free of any contaminants. For proper surface preparation recommendations, please consult a reputable floor applicator.

Mixing and Thinning

AMBER-SHIELD™ MC-4509 is a one component product supplied in 1 US gallon container.

Thinning is not normally required; however, at lower temperatures, small amounts (10% or less) of Glass Shield GS UC 500S thinner can be added depending on local VOC and air quality regulations. Any solvent addition should be made after the one component product is thoroughly stirred.

The pot life or the "working pot" is up to 6 hours. After the paint is stirred and poured, immediately seal the original can. Higher temperatures or humidity will shorten the pot life. Do not apply over water or frozen surfaces.



Application Conditions

Industry standards are for the substrate temperatures to be above 10° C of the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate.

Special application techniques may be required above or below normal application conditions.

Condition	Material	Surface	Ambient	Humidity
Normal	60 - 85° F (16 - 29° C)	65 - 85° F (18 - 29° C)	60 - 90° F (16 - 32° C)	0 - 65%
Minimum	50° F (10° C)	23° F (5° C)	23° F (5° C)	0%
Maximum	90° F (32° C)	100° F (35.5° C)	100° F (35.5° C)	85%

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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Application

AMBER-SHIELD™ MC-4509 can be applied by brush, roller or spray. For spray equipment adjustments, please contact one of our sales representative or technicians.

Curing times given at 23°C (73°F) and 40% relative humidity. Higher or lower temperatures will affect drying times. Dry film thickness over 3 mils DFT may cause bubbling.



Airless & Air Spray

Manufacturer	Graco	Manufacturer	Devilbiss	SATA
Pump	30 : 1	Spray gun	HET	K3 RP
Fluid hose	3/8" x 100' max	Fluid tip	1.4-1.6 ff	1.4-1.6
Tip size	*	Air cap	#410 / 414	
PSI	2400 PSI min.	Fluid line	3/8"	3/8"
		Pressure pot	15 - 25 psi	40 psi
		Atomizing air	50 - 60 psi	36 psi

* Refer to Kremlin chart for specific uses or consult Glass Shield technical services

Curing Schedule

Ventilate the substrate for 2 hours after application. Curing times are based on a 2.0-3.0 mil (50-75 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure of the film. Consult a Glass Shield representative for further information. 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 40°F (4° C) may temporarily soften for several hours, after temperatures rise to 60°F (16° C). This is a normal condition and will not influence performance.

Dry to touch	2 hours
Dry to recoat	2-4 hours (sanding required after 10 hours)
Hard	4-6 hours
Full cure	7 days

1-800-361-6652

PAINT SOLUTIONS

FOR EVERY INDUSTRIES



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MC 4509**

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