

Product Data/ Application Instructions

- Fast dry, dry to touch in 2 hours at 70°F (21°C)
- Recoat in 3 hours at 70°F (21°C)
- Low temperature cure down to 0°F (-18°C)
- Exceptional corrosion protection in industrial and marine corrosive environments
- Surface tolerant, excellent adhesion to tight rust and prepared damp surfaces
- Self priming topcoat over most existing coatings
- Can be overcoated with a wide range of topcoats
- Meets all existing VOC regulations including SCAQMD Rule 1113 requirements for 2002
- Temperature resistance to 450°F on insulated or uninsulated surfaces when mixed with Blome glass flake additive.

MC-3010's low solvent level meets VOC requirements, reduces the chances for film pinholing and solvent entrapment at the substrate-coating interface, often a major cause of coating failure with conventional epoxies and lower solids systems.

MC-3010 is available in a variety of colors, and therefore does not require a topcoat. For extended weatherability or special uses, a topcoat may be desired.

Typical Uses

MC-3010 is designed for use in a variety of areas, even those where surface preparation is impossible. As a maintenance coating, MC-3010 protects steel structures in industrial facilities, bridges, tank exteriors, marine weathering, offshore, oil tanks, piping, roofs, water towers and other exposures. MC-3010 has good chemical resistance to splash/spillage, fumes and immersion in neutral, fresh and salt water (see resistance table). Contact your Blome representative for specific information.

Physical Data

Finish	Semigloss
Color	Standard, Rapid Response, custom colors and aluminum
Components	2
Curing mechanism	Solvent release and chemical reaction between components

Volume solids (ASTM D2697 modified)	
MC-3010	83% ± 3%
MC-3010AL	85% ± 3%

Dry film thickness (per coat)	4-8 mils (100-200 microns)
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Coats	1 or 2
Theoretical coverage	ft ² /gal m ² /L
1mil (25 microns)	
MC-3010	1331 32.6
MC-3010AL	1363 33.1

5 mils (125 microns)	
MC-3010	266 6.5
MC-3010AL	273 6.7

VOC	lb/gal	g/L
MC-3010 mixed*	1.5	180
mixed/thinned (½-pt/gal)*	1.8	216
MC-3010AL mixed**	1.0	123
mixed/thinned (½-pt/gal)**	2.0	234

* EPA method 24

** Calculated

Temperature resistance,*	wet		dry
	°F	°C	°F °C
continuous	100	38	200 93
intermittent	100	38	350 177

w/Blome Glass Flake Additive (1 gal can/ 2gal mix)	
	wet dry
continuous	100°F (38°C) 425°F (218°C)
intermittent	100°F (38°C) 450°F (232°C)

Flash point (SETA)	°F	°C
MC-3010/3000 resin*	131	55
MC-3010 cure	114	46
MC-3010AL resin	110	43
MC-3010AL cure	122	50
Blome Thinner #2	78	25
Blome Thinner #3	2	-17
Blome Thinner #4	145	63
Blome Thinner #5	20	-7

* At temperatures above 200°F, dry film thickness must not exceed 10 mils (250 mils).

* MC-3010 resin and MC-3000 resin are identical, and are packaged under a common label as MC-3010/3000 resin. MC-3010 cure and MC-3000 cure are different, and are labeled individually.

Typical Properties

Physical

Abrasion resistance (ASTM D4060)
1 kg load/1000 cycles weight loss
CS-17 wheel 102 mg

Impact resistance (ASTM D2794)
Direct 24 in \diamond lb
Reverse 6 in \diamond lb

Moisture vapor transmission (ASTM F1249)
4.0 gm/m²/day

Adhesion (ASTM D4541) 1200 psi

Performance

Salt spray (ASTM B117) 3500 hours
Face corrosion/blistering None

Humidity (ASTM D2247) 1500 hours
Face corrosion/blistering None

Prohesion (ASTM G85-A5) 3000 hours
Face corrosion/blistering None

Chemical Resistance Guide

Environment	Immersion		Splash and Spillage		Fumes and Weather	
	3010	3010AL	3010	3010AL	3010	3010AL
Acidic	*	*	F	F	G	G
Alkaline	*	*	E	G	E	E
Solvents	*	*	G	G	E	E
Salt water	E	*	E	E	E	E
Water	E	*	E	E	E	E
F-Fair	G-Good	E-Excellent				

*Contact your Blome representative.

This table is only a guide to show typical resistances of MC-3010 and MC-3010AL. For specific recommendations, contact your Blome representative for your particular corrosion protection needs.

Systems using MC-3010 or MC-3010AL

1st coat	2nd Coat	3rd coat
MC-3010	None	None
MC-3010	MC-3010	None
MC-3010	MC-3030	None
MC-3010	MC-3050	None

Note: For color contrast when two coats of MC-3010 Aluminum are used, MC-3010 Aluminum Red can be used as the first coat.

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method. When this is impossible or impractical, MC-3010 can be applied over mechanically cleaned surfaces. All surfaces must be clean, dry and free of all contaminants, including salt deposits. MC-3010 may be used over most types of properly prepared and tightly adhering coatings. A test patch is recommended for use over existing coatings.

Steel – Remove all loose rust, dirt, moisture, grease or other contaminants from surface. Power-tool clean SSPC-SP3 or hand-tool clean SSPC-SP2. For more severe environments, dry abrasive blast SSPC-SP7. Water jetting is also acceptable. For immersion service – dry abrasive blast SSPC-SP10.

Aluminum – Remove oil, grease or soap film with neutral detergent or emulsion cleaner, treat with Alodine® 1200, Alumiprep® or equivalent or blast lightly with fine abrasive.

Galvanizing – Remove oil or soap film with detergent or emulsion cleaner, then use zinc treatment such as Galvaprep® or equivalent or blast lightly with fine abrasive.

Concrete – Acid etching (ASTM D4260) or abrasive blast (ASTM D4259) new concrete cured a minimum of 14 days.

Application Data

Applied over Steel, concrete, aluminum, galvanizing

Surface preparation
Steel SSPC-SP2, 3, 6, 7, 10 or 11
Concrete ASTM D4259 or 4260
Aluminum Alodine®, Alumiprep® or light abrasive blast

Galvanizing Galvaprep® or light abrasive blast

Method Airless or conventional spray. Brush or roller may require additional coats.

Mixing ratio (by volume) 1 part resin to 1 part cure

Environmental conditions Air and surface temperature 20° to 120°F (-6° to 49°C)

Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation. At freezing temperatures, surface must be free of ice.

Drying time (ASTM D1640) (hours)

	touch					
	°F/°C					
	120/49	90/32	70/21	50/10	32/0	20/-6
MC-3010	0.5	1	2	8	24	48
MC-3010AL	0.5	2	3.5	11	30	—
through						
MC-3010	1	2	4.5	13	38	96
MC-3010AL	1.5	3.5	7	17	48	—
MC-3010	(cure to immersion* (days))					
	1	2	3	7	21	—

*non-potable water

Thinner Blome Thinner #2 or #5
Equipment cleaner Blome Thinner #3

	°F/°C		
	90/32	70/21	50/10
Recoat/Topcoat time	1	3	6
minimum (hours)			

Recoat/Topcoat time @ 70°F (21°C)

System	Maximum time
MC-3010/MC-3010	1 month
MC-3010/MC-3050 or MC-3030	1 week
MC-3010AL/MC-3010AL	2 weeks

Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures - not simply ambient air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window.

Note: If maximum time is exceeded, roughen surface. For topcoats (finish coats) not listed, See Product Data sheet for specific topcoat time limitations.

Pot life (hours)	°F/°C			
	90/32	70/21	50/10	32/0
MC-3010				
unthinned	0.75	1	2	4
1/2 pint thinner	1	1.5	2.5	5
MC-3010AL				
unthinned	0.5	0.75	1.5	—
1/2 pint thinner	1	1.25	2	—

Pot life is the period of time after mixing that a five-gallon unit of material is sprayable when thinned as recommended. Mixture may appear fluid beyond this time, but spraying and film build characteristics may be impaired.

Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

Airless spray – Standard equipment having a 45:1 or higher pump ratio, with a 0.017- to 0.021-inch fluid tip.

Conventional spray – Industrial equipment, such as DeVilbiss MBC or JGA or Binks 18 or 62 spray gun. A moisture and oil trap in the main air supply line, a pressure material pot with mechanical agitator and separate regulators of air and fluid pressure are recommended.

Power mixer – Jiffy Mixer powered by an air or explosion-proof electric motor.

Brush or roller – Additional coats may be required to attain proper thickness.

Application Procedure

1. Flush all equipment with thinner or Blome Thinner #3 before use.
2. Stir resin and cure using an explosion-proof power mixer to disperse pigments.
3. Add cure to resin. Mix thoroughly until uniformly blended to a workable consistency.
4. Do not mix more material than can be used within the expected pot life.
5. For optimum application, material should be from 50° to 90°F (10° to 32°C). Above 122°F (50°C), sagging may occur.
6. Use only Blome recommended thinners. For potable water applications, see current NSF listing at www.nsf.org for approved thinners and thinning restrictions. For other applications above 70°F (29°C) use Blome Thinner #5, at lower temperatures use Blome Thinner #2. A small amount of thinner greatly reduces viscosity; excessive thinning will cause running or sagging. Thin cautiously as follows:

	MC-3010	MC-3010AL
Airless – up to	½ -pt/gal	1pt/gal
Conventional – up to	½ -pt/gal	1pt/gal

Below 50°F additional thinning may be needed and multiple coats required to achieve specified thickness.

Note: For potable water tank lining applications, see current NSF listing at www.nsf.org for approved thinner and thinning restrictions.

7. To minimize orange peel appearance, adjust conventional spray equipment to obtain adequate atomization at lowest air pressure.
8. Apply a wet coat in even, parallel passes with 50 percent overlap to avoid holidays, bare areas and pinholes. If required, cross spray at right angles.
9. When applying MC-3010 directly over inorganic zincs or zinc rich primers, a mist coat/full coat technique may be required to minimize bubbling.

10. Ventilate confined areas with clean air during application and while curing the final coat. Prevent moisture condensation on the surface between coats.
11. Repair damaged areas by brush or spray.
12. Clean equipment with thinner or Blome Thinner #3 immediately after use.

Note: Do not apply MC-3010AL on water-damp surfaces.

Shipping Data

Packaging unit	2 gal	5 gal
cure	1-gal can	2.5-gal can
resin	1-gal can	2.5-gal can
Shipping weight (approx)	lbs	kg
2-gal unit		
MC-3010 cure	12.8	15.8
MC-3010/3000 resin	13.7	16.2
MC-3010AL resin	11.0	15.0
MC-3010AL cure	13.3	15.9
5-gal unit		
MC-3010 cure	33.0	15.0
MC-3010/3000 resin	35.0	15.9
MC-3010AL resin	28.3	12.8
MC-3010AL cure	34.5	15.6

Shelf life when stored indoors at 40° to 100°F (4° to 38°C)

resin and cure: 1 year from shipment date.

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities.

This mixed product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. Blome makes no recommendation about the types of safety measures that may need to be adopted because these depend on application and space, of which Blome is unaware and over which it has no control.

If you do not fully understand the warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for industrial use only. Not for residential use.

Limitation of Liability

Blome's liability on any claim of any kind, including claims based upon Blome's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which gives rise to the claim. **In no event shall Blome be liable for consequential or incidental damages.**

Due to Blome's policy of continuous product improvement, the information contained in this Product Data/Application Instructions sheet is subject to change without notice. It is the Buyer's responsibility to check that this issue is current prior to using the product. For the most up-to-date Product Data/Application Instructions always refer to the Blome International website at www.blome.com.

Warranty

Blome warrants its products to be free from defects in material and workmanship. Blome's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Blome's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Blome in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Blome of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

Blome makes no other warranties concerning the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Blome be liable for consequential or incidental damages.

Any recommendation or suggestion relating to use of the products made by Blome, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.



1450 Hoff Industrial Drive, O'Fallon, MO 63366 PH: 636.379.9119 www.blome.com