

MC-3002

Maintenance Coating Systems

High-solid surface tolerant epoxy coating

Product Data Product Highlights

- VOC Compliant
- High-performance general maintenance coating for new or old steel
- Compatible with zinc silicate and epoxy primers
- Can be coated with wide range of topcoats
- Can be applied in hot weather applications.
- USDA authorized for use in Federally inspected plants
- Resists high humidity

MC-3002 is a two-component amine cured, high solids, high build epoxy paint. It forms a hard and tough coating, excellent “undercutting” resistance and has good wetting properties for bonding to marginally prepared substrates.

Typical Uses

- As a self-priming, surface tolerant paint system or as an intermediate or finishing coat in heavy duty paint systems where low VOC and high film build are required.
- Multipurpose coating ideal as a coating system over marginal or poorly prepared surfaces where blasting is impractical or prohibited.
- MC-3002 may be used directly on cured zinc silicate or spray-metallized surfaces to minimize popping.
- As a topcoat where the usual outdoor cosmetic appearance of epoxy paints is acceptable.

Typical Properties

Physical Data

Finish	Low Gloss – 85 ± 5%
Color	Standard Industrial Colors and Aluminum

White and light colors may show yellowing on aging. Yellow, red and orange colors will fade faster than other colors due to the replacement of lead-based pigments with lead-free pigments in these colors

Components	2
Curing mechanism	Solvent release and chemical reaction between components

Volume solids (ASTM D2697 modified)	
High Temperature Cure	82% ± 3%
Dry film thickness (per coat)	4 – 6 mils
Coats	1 or 2

Theoretical coverage	ft ² /gal
4/5 mils (100/125 µm) – DFT/WFT	328

VOC	lb/gal	g/L
Mixed*	1.34	161
<i>*EPA method 24</i>		
Temperature resistance		
	°F	°C
Continuous	150	65.5
Flash point (SETA)	°F	°C
Mixed	80	27
Density	11.7 lbs/gal	
Mix Ratio (resin:hardener)	4:1 (by volume)	
Pot Life –		
	at 75°F/ 24°C	3 hours
	at 90°F/ 32°C	1.5 hours
Recoat/Topcoat times		

Temperature	Tack-free	Minimum	Maximum*
90°F	1-2 hours	5-6 hours	3 days
75°F	3-4	7-8	7
50°F	8-12	36-48	10

**If kept free from contamination*

Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity. For maximum times listed, surfaces must be free of contamination during curing period, or the material must be cleaned and roughened before recoating.

Note: If maximum time is exceeded, roughen surface.

Shelf life when stored indoors at 40° to 100°F (4° to 38°C) resin and cure: 1 year from shipment date.

Surface Preparation

New steel: When used as an intermediate or finishing coat please refer to the data sheet for the. When used as a primer please refer to the specification.

Zinc silicate painted or spray-metallized surfaces: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Zinc salts (white rust) must be removed by high pressure hosing combined with rubbing with a stiff nylon brush if necessary. It is recommended to recoat spray-metallized surfaces as soon as possible to avoid possible contamination.

Concrete: Remove slip agent and other possible contaminants by emulsion washing followed by high pressure hosing with fresh water. Remove scum layer and loose matter to a hard, rough and uniform surface, preferably by abrasive blasting, possibly by other mechanical treatment or acid etching. Seal surface with suitable sealer, as per relevant painting specification.

Repair and maintenance: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by

(high pressure) fresh water cleaning. Clean damaged areas thoroughly by hand tool cleaning (SSPC-SP 2) or power tool cleaning (SSPC-SP 3) or by abrasive blasting to min. commercial blast (SSPC-SP 6). Improved surface preparation will improve the performance of Blome MC-3002. As an alternative to dry cleaning, water jetting to min. WJ-2 (NACE No. 5/SSPC-SP 12) may be used. Feather edges to sound and intact paint. Dust off residues.

On pitted/corroded surfaces, excessive amounts of salt residues may call for water jetting, wet abrasive blasting, alternatively dry abrasive blasting, high pressure fresh water hosing, drying, and finally, dry abrasive blasting again.

Application/Material Conditions

Ensure that the temperature of the components is at least 50°F (10°C) before using.

Apply only on a dry and clean surface with a temperature above 5°F the dew point to avoid condensation. Use only when application and curing can proceed at temperatures above approximately 7°C/45°F. The temperature of the paint itself should be 10°C/50°F or above, but below approximately 32°C/90°F to for best results. Optimal spraying properties are obtained at a paint temperature of 18-22°C/64-72°F. In warmer climates, the paint should be stored in a cool place and the paint temperature should preferably be kept below 32°C/90°F. In confined spaces provide adequate ventilation during application and drying. In cases where faster drying at very low temperatures is required, consult Blome for additional curing agent options.

Application Equipment

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

Airless spray –

Standard equipment with 30:1 pump ratio or larger

Tip - 0.019 to 0.023-inch fluid tip.

Nozzle pressure – 2400 - 2700 psi.

Hoses –

300 feet, ½" internal diameter

100 feet, 3/8" ID

20 feet, 1/4" ID

Fan – 40-60° Depending on space and surface

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

Brush or roller – Use for touch up.

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 59° to 86°F (15° to 30°C).

6. Typical Thinning Amounts:

Airless Spray: 10% Thinner S-74

Roller: 10 – 20% Thinner S-74

7. Use only Blome recommended thinners. A small amount of thinner greatly reduces viscosity; excessive thinning will cause running or sagging. Thin cautiously.
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-3002 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 between coats 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.

Packaging

Blome MC-3002 is available in 1 and 5-gallon units.

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.

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 Safety Data Sheets (SDS) for each component before using.

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.



Surrounding You with Exceptional Protection

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

Revision – 10/2017