

Product Data and Application Instructions

Features

- Low VOC, waterborne coating
- Direct-to-metal (DTM) coating for new or old steel
- Cures through wide temperature range
- Excellent adhesion to a wide range of metallic and non-metallic surfaces
- Excellent color and gloss retention in UV
- Easy to apply, single component coating
- Low odor
- Excellent hiding power
- Flash rust resistant
- High humidity and moisture tolerance
- Temperature resistance to 250°F on insulated or uninsulated surfaces

MC-100-WB is a satin finish 100% Acrylic waterborne enamel designed for direct-to-metal application. This product provides corrosion protection where moderate chemical and solvent resistance is required. MC-100-WB is fast drying with low odor. It is recommended for use on properly prepared interior or exterior metal, concrete, and concrete masonry unit (CMU) surfaces.

Typical Uses

MC-100-WB is designed for use where moderate chemical resistance is needed for areas with limited exposure to splash & spill, and in reasonably dry processing environments. MC-100-WB is well suited for applications where color retention (non-yellowing) is desired. It can be used to coat concrete, CMU, and/or metallic surfaces.

General uses include Food & Beverage, Pharmaceutical, Chemical Packaging, Commercial Kitchens and Hospitals. Contact your Blome representative for specific information.

Physical Data

Gloss	Satin: 20 to 40 (60° Gloss Meter)	
Color	Consult Blome for color options	
Components	1	
Curing mechanism	Solvent release and acrylic cross-linking during drying	
Solids (ASTM D2697 modified)		
Volume	38% ± 2%	
Weight	50% ± 3%	
Wet film thickness (per coat)	5.5-8.5 mils (140-216 microns)	
Dry film thickness (per coat)	2-3 mils (50 -76 microns)	
Coats	1 or 2	
Theoretical coverage	ft ² /gal	m ² /L
2 mils DFT (5.5 mils WFT)	300	7.4
3 mils DFT (8.3 mils WFT)	200	5.0
VOC (Calculated)	1.8 lb/gal (220 g/L)	
Temperature resistance,*	250 °F 121 °C	
Flashpoint (TCC)	>200 °F (93 °C)	

Recoat/Topcoat time @ 77°F/25°C

4 hours, min
24 hours, max

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

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-100-WB can be applied over mechanically cleaned surfaces. All surfaces must be clean, dry and free of all contaminants, including salt deposits.

MC-100-WB 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 blasting is also acceptable. For immersion service – dry abrasive blast SSPC-SP10. For high-heat service on uninsulated substrates, abrasive blast per SSPC-SP6. For insulated substrates, abrasive blast per SSPC-SP10. In both cases, a 2-3 mil profile must be obtained.

Aluminum – Remove oil, grease or soap film with neutral detergent or emulsion cleaner, treat with Blome aluminum wash treatment or blast lightly with fine abrasive.

Galvanizing – Remove oil or soap film with detergent or emulsion cleaner, then **use Blome zinc wash treatment** 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-SP1, 2, 3, 6, 7, 10, 11, or 12
Concrete	ASTM D4259 or 4260
Aluminum	Blome aluminum wash treatment, or light abrasive blast
Galvanizing	Blome zinc wash treatment, or light abrasive blast
Application method	Airless or conventional spray, brush or roller
Environmental conditions for application	
Product	60° to 90°F (16° to 32°C)
Ambient	50° to 100°F (10° to 38°C)
Substrate	40° to 120°F (10° to 49°C)

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.

Brush: High Quality Polyester/Nylon Brush

Roller: 3/8" nap roller cover

Airless Spray: Pressure 1500 - 3000 psi, tip 0.013" to .0015"

Conventional Spray: Fluid Nozzle: DeVilbiss 510 gun, with 704 or 777 air cap with E tip and needle, or comparable equipment.
Atomization Pressure: 55-70
Fluid Pressure: Can not specify, dependent on numerous factors.

Thinning: Thinning is not usually required. Excessive thinning or insufficient film thickness may cause rust staining. If rust staining occurs, apply an additional coat. Do not add oils, paint thinners, or any paint additives.

Application Procedure

1. Mix thoroughly before and during use.
2. To minimize orange peel appearance, adjust conventional spray equipment to obtain adequate atomization at lowest air pressure.
3. 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.
4. Ventilate confined areas with clean air between coats and while curing the final coat. Prevent moisture condensation on the surface between coats.
5. Repair damaged areas by brush or spray.
6. Clean equipment soap and water immediately after use.

Shipping Data

Packaging unit (volume)	1 gal (3.78 L)	5 gal (18.9 L)
(weight)	10.2 LB (4.6 kg)	51 LB (23.2 kg)

Shelf life when stored indoors in unopened containers at 40° to 100°F (4° to 38°C) - 1 year from shipment date.

KEEP FROM FREEZING

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

Safety Precautions

Proper safety procedures should be followed at all times while handling this product. These measures may include, without limitation: implementation of proper ventilation, wearing of proper protective clothing and masks, tenting and proper separation of application areas. **USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN.**

Spray equipment must be handled with due care and in accordance with manufacturer's recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury. Read all label and Safety Data Sheet for important health/safety information prior to use. 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.

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