

Solvent-free Epoxy Coating

DESCRIPTION AND USES

Blome MC-3210 is an amine-cured, solvent-free epoxy coating which cures to a strong and smooth lining. It complies fully with the Federal Food, Drug, and Cosmetic Act and all applicable food additive regulations, including 21 C.F.R. § 175.300 ("Resinous and polymeric coatings").

MC-3210 is used as a one coat system on internal surfaces of rail cars transporting bulk quantities of dry food and plastic pellets for the manufacturing of food-contact materials.

PACKAGING/COVERAGE

MC-3210 is available in 1 gallon and 5 gallon units

TYPICAL PROPERTIES

Color	Blue
Gloss	Glossy
Solids by Volume	96%
Density	11.7 lbs./gal
Flash Point	>199 °F/93 °C
VOC	55 g/L (0.46 lbs./gal)
Service Temperature (dry)	248 °F/120 °C
Recommended Thickness	10-12 mils (250-300 microns)
Mix Ratio (resin:hardener)	1:1 (by volume)
Pot Life @ 68 °F/20 °C	30 minutes
Cure Schedule @ 68 °F/20 °C	Dry to touch: 10 hours Full Cure: 7 days
Recoat Window @ 77 °F/25 °C	Minimum: 10 hours Maximum: 2 days

This material is normally applied in one coat. The recoat window above applies to touch up areas or areas with low film thickness. If the maximum recoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

COVERAGE

Dry Film Thickness – Mil (Microns)	10 (250)
Wet Film Thickness – Mil (Microns)	10 (250)
Coverage – Ft ² /Gal (M ² /L)	154 (3.8)

STORAGE AND SHELF LIFE

Keep MC-3210 components tightly sealed in their original containers until ready for use. Store at 40°F to 90°F, out of direct sunlight. MC-3210 has a

shelf life of 1 year, in original, unopened containers. Stir containers before use.

TEMPERATURE

Use MC-3210 only where application and curing can proceed at temperatures above 50°F (10°C). The temperature of the surface must also be above this limit. The components should be heated to approximately 122°F (50°C) when applied in plural component equipment. Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation.

SURFACE PREPARATION

Surfaces must be dry and free of dirt, dust, oil, grease, chemicals and contaminants immediately prior to applying MC-3210. Abrasive blast steel surfaces to a near white metal finish with a 2 to 3 mil anchor profile. (Ref. SSPC-SP-10)

APPLICATION EQUIPMENT

MC-3210 is a high viscosity material that requires special measures to be taken during application. Spray application should only be carried out with heated, plural component, airless equipment with proportioning pump adjusted to mixing ratio 1:1. Heated storage tanks with agitators, material feed pumps, fluid heaters, solvent flushing pump, one mixer manifold assembly and two mixer tubes (static mixers") are required. Other similar spray systems may be used. Please consult Blome for more details:

Supply hose:	min. 3/8" preferably insulated and heated
Recommended length:	75 ft. to 100 ft.
Integrator hose:	1/2" insulated and heated.
Recommended length:	25 ft to 50 ft.
Spray hose:	1/4" (max. length 10 ft.)
Nozzle size:	.019" - .021", reversible
Nozzle pressure:	3800-4500 psi at 104°F/40°C

MIXING AND APPLICATION

Due to the short pot life of this material, it must be applied with plural component equipment. Premix the components separately before using. Contact Blome for additional information. Small mixes may be made in single containers for touch up and repairs.

Heating of the both components is required in order to optimize viscosity for proper application.

Circulate the material until it reaches a temperature between 118°F/48°C to maximum 140°F/60°C ideally 122°F/50°C. This should be done for both resin and curing agent. When this has been achieved, the material is ready for spraying. Circulation should be stopped.

Typical spray temperature is around 40°C/118°F (at the nozzle).

CLEANUP

Before material cures, tools and equipment should be cleaned using hot, soapy water. After MC-3210 begins to cure, xylene or MEK will be required. Chlorinated solvents may be used if flammable solvents are prohibited.

SAFETY PRECAUTIONS

Avoid contact with skin and eyes. Do not ingest material or inhale vapors. When mixing or applying MC-3210, always wear chemical goggles, appropriate rubber gloves, and other appropriate safety clothing. When spraying in confined areas, wear a supplied air respirator and make provisions for forced air ventilation. When spraying in open areas, a NIOSH approved respirator suitable for organic vapors can replace supplier air. Refer to Blome material safety data for more information.

WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANTABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.

Printed: July 15, 2012
Supersedes all previous literature