

## Blome 925 Emulsified Epoxy Concrete/ Mortar

### PRODUCT DESCRIPTION

Blome 925 is a water based epoxy binder designed for use with Portland cement and aggregate to restore deteriorated concrete surfaces. Blome 925 bonds tenaciously to existing concrete, making it suitable for patching spalled concrete. This material can also be used as a mortar for filling form voids and honeycombs in vertical concrete surfaces. When mixed as a castable material, Blome 925 is well suited for applications such as restoring pump foundations or re-pitching floors for proper drainage. Blome 925 may be top-coated with various Blome high performance coatings and toppings. Consult Blome for specific recommendations.

### TYPICAL PROPERTIES

Adhesion to Concrete:	Excellent
Compressive Strength (ASTM C-109):	5,500 – 6,000 psi
Flexural Strength (ASTM C-348):	1,800 – 2,000 psi
Impact Resistance (ASTM D-2444):	270 lb. in.
Tensile Strength (ASTM C-190):	875 psi
Pot Life:	45 minutes at 75°
Curing Times (1/2" thickness at 70°F)	
Light Traffic:	24 hours
Heavy Traffic:	48 hours
Final Cure:	28 days

### PACKAGING & STORAGE

Blome 925 is packaged in three unit sizes as follows:

3 Gallon Unit consisting of

- 1 – 1 gallon can Resin (Part A)
  - 2 – 1 gallon cans Hardener (Part B)
- Volume yield: 1.6 cu. ft.

15 Gallon Unit consisting of

- 1 – 5 gallon pail Resin (Part A)
  - 2 – 5 gallon pails Hardener (Part B)
- Volume yield: 8 cu. ft.

Portland cement (Type 1) and aggregates for these units are supplied by others to achieve yields listed above.

A complete ½ cubic foot unit, consisting of Resin, Hardener and pre-blended cement and aggregate is also available.

Each component is pre-measured and ready to use. Store unopened components in a dry place, out of direct sunlight and protected from the elements. Storage temperature should be 50-95°F. Properly stored, Blome 925 has a shelf life of 12 months. Refer to the date of manufacture printed on the label.

### SPECIFICATION GUIDE

Use Blome 925 Emulsified Epoxy Concrete/Mortar as manufactured by Blome International, O'Fallon, MO (800) 886-3455. Install in accordance with the latest data sheet for Blome 925 and the corresponding Blome overcoat material as well as good industry practice.

## **APPLICATION GUIDELINES ENVIRONMENTAL CONDITIONS**

Blome 925 should be applied at surface and air temperatures of 50°F minimum and 95°F maximum. The ideal temperature range is 60-90°F. Air temperature should always be at least 5°F greater than the current dew point. Do not apply Blome 925 if temperatures are expected to drop below 40°F within 24 hours after application.

## **JOBSITE STORAGE OF MATERIALS**

Proper storage of Blome International products is important to a successful application. Follow these general storage procedures:

1. Store components (Part A and Part B) unopened, at 50-85°F, out of direct sunlight and protected from the elements.
2. Keep away from heat and flame. For the 24 to 48 hours just prior to use, adjust the storage temperature to 70-85°F to facilitate handling.
3. All aggregates must be kept dry prior to use.

## **SURFACE PREPARATION**

The following recommendations generally apply to the proper surface preparation of concrete for Blome 925 but consult the data sheet of the Blome overcoat material for any additional or superseding requirements for surface preparation.

1. Concrete must be structurally sound and must not contain any accelerators or curing compounds.
2. Remove all oil, grease, chemicals or other contaminants.
3. Remove all surface laitance and expose sound concrete. Abrasive blasting is preferred. However, other methods, such as acid etching and neutralizing, may be used.
4. Handle all expansion joints, control joints, floor drains, equipment base plates and mid-floor termination points according to Blome construction details.

## **APPLICATION EQUIPMENT**

Blome 925 may be placed using conventional concrete placement and finishing tools, including vibrating screeds and form vibrators. When mixing the ½ cubic foot unit, a paddle mixer can be used. Larger batches of one cubic foot or more should be mixed using a horizontal mortar mixer.

## **MIXING AND APPLICATION**

### **FOR USE AS A PRIMER**

1. Remix individual Resin and Hardener components prior to use.
2. Carefully pre-measure desired volume of Resin and Hardener. Mix ratio is one part by volume Resin to two parts by volume Hardener.
3. Pour pre-measured amounts Resin and Hardener into container and mix thoroughly for two minutes using Jiffy-type mixer.
4. Prime area with mixed liquid at a rate of approximately 110-125 square feet per gallon. Prime only as much area as can be topped while primer is still wet, approximately four hours at 75°F. If primer is allowed to cure before topping is applied, area must be reprimed.

### **FOR FILLING FORM VOIDS AND HONEYCOMBS**

1. Remix individual Resin and Hardener components prior to use.
2. The following batch will yield approximately ½ cubic foot of Blome 925 Mortar:

Blome 925 Resin:	3.4 lbs.
Blome 925 Hardener:	6.2 lbs.
20-40 mesh sand (angular):	39 lbs.
Portland cement (Type 1):	11 lbs.

3. Blend Portland cement and sand and set aside.

4. Using Jiffy-type mixer, blend Resin and Hardener components for two minutes.
5. Slowly add Portland cement and sand mixture to combined Resin and Hardener, and blend for three minutes.
6. Using a rubber float, apply to the surface. Skim the surface with rubber float, filling form voids and honeycombs. Brush away excess so that no significant thickness is added to the concrete surface.
7. When applied in this manner, Blome 925 can receive a Blome topcoat material after 12 hours of cure.
8. Do not allow surface to become contaminated prior to topcoat application

#### FOR CONCRETE PATCHING, RESURFACING AND REPAIR APPLICATIONS

1. Follow procedures for mixing and application when used as a primer, steps 1 through 4.
2. Remix individual Resin and Hardener components prior to use.
3. Blome 925 should be mixed in a mortar mixer with at least twice the volume capacity of the material to be mixed. The following batch sizes may be adjusted based on project requirements or mixer capacity.

##### Applications up to 1"

Blome 925 Resin (Part A):	9 lbs. (1 gallon)
Blome 925 Hardener (Part B):	16 lbs. (2 gallons)
20-40 mesh sand (angular):	150 lbs.
Portland cement (Type 1):	42 lbs.
Volume yield:	1.6 cu. ft.

##### Applications over 1"

Blome 925 Resin (Part A):	9 lbs. (1 gallon)
Blome 925 Hardener (Part B):	16 lbs. (2 gallons)
20-40 mesh sand (angular):	50 lbs.
Portland cement (Type 1):	42 lbs.
Pea Gravel ¼":	100 lbs.
Volume yield:	1.6 cu. ft

Where thickness over 2" are required, up to 15% additional pea gravel by weight may be added to further extend volume by 5%.

4. Mixer must clean and free of contaminants. Prewet mixer, then remove excess water.
5. Weigh out Portland cement and aggregate.
6. Blend pre-measured Resin and Hardener components for two minutes using a Jiffy-type mixer.
7. Pour mixed Resin and Hardener into mortar mixer. Slowly add cement and aggregate and mix thoroughly for 5 minutes. Do not add other materials to the mix.

#### PLACING

1. Place material onto wet, freshly primed area.
2. When used as a repair mortar, Blome 925 is typically applied with a steel trowel and finished similar to standard concrete.
3. Screed strips may be set to control thickness and pitch. Screed material using screed boards or vibrating screed. Hand tap using flat trowel. Finish using clean, flat trowel pre-wet with water. Do not attempt to rewet surface by adding water to the surface.
4. When restoring badly deteriorated vertical surfaces, it may be necessary to set forms for placement of Blome 925. Forms should be treated with for release agent or lined with polyethylene. Follow standard concrete construction practices.

#### TOP-COATING

Blome 925 is not for use under vinyl ester or polyester materials. When using Blome 925 as an underlayment for Blome epoxy, novolac epoxy or polyurethane coatings, Blome 925 must cure a minimum of 24 hours for every 2" of thickness. Maximum recoat time without surface preparation is seven days 85°F. Do not allow the surface to become contaminated prior to topcoating. If allowed to cure beyond seven days, or if the surface becomes contaminated prior to application of topcoat, surface must be washed with detergent and sanded or abrasive blasted.

#### CLEAN-UP

Before Blome 925 gels, it can be cleaned from hand tools and equipment using hot, soapy water. After Blome 925 gels, xylene or MEK will be required for cleaning. Chlorinated solvents may be used if flammable solvents are not allowed.

#### CAUTION

Blome 925 may cause skin irritation with prolonged or repeated contact. Wear safety glasses, gloves and avoid contact with skin and eyes, and refer to the material safety data sheet, which is available for each product.

#### 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 MERCHANT ABILITY 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.

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