

Blome Primer 75 Moisture Tolerant Epoxy Primer

PRODUCT DESCRIPTION

Blome Primer 75 is a two-component, moisture-tolerant epoxy primer for steel, concrete and other substrates as specified. It is used to prime concrete, steel and other substrates prior to application of other Blome International coatings, linings, membranes, sealants and polymer concretes. It achieves a tenacious bond to the substrate and tolerates substrate dampness but not wet surfaces.

GENERAL USES

Blome Primer 75 is used as a primer for other Blome International materials in a wide variety of applications. Typical applications include:

- Secondary containment linings
- Tank linings
- Monolithic floor toppings
- In-situ polymer concrete installations
- Trench linings

HANDLING CHARACTERISTICS

- Primer 75 is available in convenient 2-parts resin to 1-part hardener kits. It is easily applied by brush, roller, spray or squeegee. Its excellent wetting characteristics and low viscosity facilitate application.
- Primer 75 is normally applied at 100 square feet per gallon on concrete and other porous surfaces.
- Primer 75 is normally applied at 150 square feet per gallon on steel and other non-porous substrates.
- Consult the data sheet for the Blome International overcoat material for additional details and revised film thickness requirements.
- Primer 75 is also available in a Low Temperature Curing version, which allows installation at temperatures as low as 40°F.

TYPICAL PROPERTIES WET

<u>Primer 75 Resin (Part A)</u>	<u>Property</u>
Composition:	Epoxy resin, epoxy functional diluents
Appearance/Color:	Viscous Liquid / Hazy, Milky White
Flash Point (Closed Cup):	>120 °C
Density @ 25 °C:	1.1 – 1.2 g/mL
Viscosity @ 25 °C (Dynamic):	3000-3500 cP (3000-3500 mPa·S)
Solids (by weight):	100%

<u>Primer 75 Hardener (Part B)</u>	<u>Property</u>
Composition:	Aliphatic amine/amide blend
Appearance/Color:	Clear liquid / light yellow to amber
Flash Point (Closed Cup):	>130 °C
Density @ 25 °C:	1.00 – 1.05 g/mL
Viscosity @ 25 °C (Dynamic):	200-400 cP (200-400 mPa·S)
Solids (by weight):	100%

PROPERTIES, CONT.

<u>Primer 75 - Mixed</u>	<u>Property</u>
Appearance/Color:	Flowable liquid/slightly hazy
Flash Point (Closed Cup):	>120 °C
Mix Ratio (Part A:Part B):	2:1/volume
Pot Life @ 25 °C:	25-40 minutes
Pot Life @ 50 °C:	10-20 minutes
Density @ 25 °C:	1.05 – 1.15 g/mL
Viscosity (Dynamic):	500-800 cP (500-800 mPa·S)
Solids (by weight):	100%

CURED

<u>Primer 75 - Cured</u>	<u>Property</u>
Water absorption:	< 0.1%
Adhesion to concrete:	>3.45 MPa (concrete failure)
Adhesion to steel:	>9.65 MPa
Service temperature (direct):	100 °C
Service temp (behind block/membrane):	150 °C

PACKAGING & STORAGE

Primer 75 is packaged in 1.5-gallon and 15-gallon kits. 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 10-50°C. Properly stored, Primer 75 has a shelf life of 24 months at 10-21°C and 12 months at 40-50°C. Shelf life is 6 months above 50 °C. Recertify material if shelf life is exceeded.

SPECIFICATION GUIDE

Prime all surfaces with a two-component, moisture-tolerant epoxy primer meeting the generic formulation and performance characteristics of Blome Primer 75 as manufactured by Blome International, O'Fallon, MO (800) 886-3455. Install in accordance with the latest data sheet for Blome Primer 75 and the corresponding Blome overcoat material as well as good industry practice.

APPLICATION GUIDELINES ENVIRONMENTAL CONDITIONS

Primer 75 should be applied at surface and air temperatures of 10°C minimum and 50°C maximum. The ideal temperature range is 20-35°C. Air temperature should always be at least 3°C greater than the current dew point.

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 10-50°C, 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 20-35°C to facilitate handling.

SURFACE PREPARATION- STEEL

The following recommendations generally apply to the proper surface preparation of steel for Primer 75 but consult the data sheet of the Blome overcoat material for any additional or superseding requirements for surface preparation.

1. Steel substrate must be free of all oil, grease, dirt, dust, mill scale, rust, existing coatings and other contamination.
2. All welds must be smooth and continuous. All weld splatter, buckshot, laminations, and slivers must be removed and ground smooth.
3. Undercuts and pinholes must be filled with weld metal and ground smooth.

4. *Atmospheric service:* Abrasive blast in accordance with SSPC-SP 10 Near White Blast Finish (NACE No. 2) and 2 to 4 mil dense, sharp anchor profile.
5. *Immersion service:* Abrasive blast in accordance with SSPC-SP 5 White Metal Blast Finish (NACE No. 1) and 2 to 4 mil dense, sharp anchor profile.

SURFACE PREPARATION- CONCRETE

The following recommendations generally apply to the proper surface preparation of concrete for Primer 75 but consult the data sheet of the Blome overcoat material for any additional or superseding requirements for surface preparation.

1. Concrete should be adequately cured, possess adequate integrity and not be expelling excess water of hydration. A rule of thumb for cure of new concrete is 28 days cure at 21°C but that is not an assurance that the concrete has achieved adequate physical properties.
2. Concrete should exhibit a compressive strength of 3,000 psi minimum and tensile strength of 300 psi or higher.
3. Ground slabs and new concrete should be tested for excess moisture in accordance with ASTM D 4263 Plastic Sheet Test Method; any water on the backside of the sheet after overnight exposure is an unacceptable surface for coating.
4. We recommend utilization of a low water-cement ratio, preferably 0.38 and adequate superplasticizers for placement is recommended, particularly when cure time to coat is critical.
5. New concrete must also be free of curing compounds, form release agents and any other contamination that might inhibit adhesion.
6. Old concrete must be free of existing coatings or toppings and any loose or unsound concrete must be removed. All concrete must be cleaned, as necessary, in accordance with ASTM D 4258. The resultant surface should be free of all oil, grease, and other contamination. Consult Blome International for special procedures for oil contaminated surfaces.
7. Upon completion of cleaning, the concrete surface shall be prepared in accordance with ASTM D4259.
8. The resultant surface should be free of laitance and efflorescence and have a surface texture similar to medium (60-80 grit sandpaper).

SURFACE PREPARATION- MISCELLANEOUS SURFACES

Consult Blome International for use over substrates other than steel or concrete.

MASKING & PROTECTION

Mask or remove adjacent surfaces and equipment that are not to be lined and all termination points.

APPLICATION EQUIPMENT

Primer 75 may be applied by brush, roller, squeegee or spray. Since brush application is often for small areas or touchup, disposable china bristle brushes are recommended. Roller covers should be phenolic core roller suitable for epoxies and the nap thickness should reflect the texture of the substrate. Flat squeegees may be used and solvent resistant squeegee blades will facilitate cleanup and reuse. Primer 75 may also be applied by spray using airless spray equipment or plural component spray equipment. A 30 to 1 ratio pump, 3/8" ID material line and a spray gun such as a Graco Silver Gun is suggested.

MIXING TECHNIQUE

We recommend using Jiffy type mixers for all mixing and stirring. When operating the mixer, avoid plunging it up and down in the bucket. This can fold air into the resin, which may cause bubbles to form in the coating after it has been applied. Be especially careful not to allow water to enter the mix.

WORKING TIME

The working time for Primer 75 is 30-35 minutes at 25°C in 1-½ gallon kits. Working time will be longer for cooler temperatures and will be much shorter at higher temperatures. Larger kit sizes will also reduce working time.

MIXING & APPLICATION

1. Add the hardener to the resin and thoroughly mix for at least 1-2 minutes. Uniform mixing is critical to uniform curing of the applied film.
2. Apply Primer 75 at a uniform thickness using the application method of choice. If applying by spray or squeegee to concrete surfaces, backroll to ensure adequate wetting of the substrate and encapsulation of any fines on the surface.
3. Topcoats are best applied within 24 hours after primer is applied. Topcoats may be applied while primer is tacky or after initial cure, within 24 hours at 25°C.

TOUCH-UP & RECOATING

Primer 75 may be recoated with itself or top coated without special surface preparation within 24 hours. Beyond 24 hours, light sanding to de-gloss is recommended before recoating or top coating. If Primer has cured for longer than seven (7) days, light sanding to de-gloss and repriming are recommended.

CLEAN-UP

The following tips will be helpful in cleaning hand tools and equipment after use. Before Primer 75 gels, it can be cleaned from hand tools and equipment using hot, soapy water. Spray equipment should be flushed periodically and at days end with solvent to avoid gelling in the equipment and hoses. Follow the equipment manufacturer's recommendations for proper cleaning and care instructions. After Primer 75 gels, xylene or MEK will be required for cleaning.

CAUTION

Primer 75 may cause skin irritation with prolonged or repeated contact. Avoid skin contact and follow the safety data sheet, which is available for each component.

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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