



TL-94 Trowelable Monolithic Novolac Epoxy Liner

PRODUCT DESCRIPTION

Blome TL-94 is a heavily filled, trowelable monolithic Novolac Epoxy liner that is applied at a nominal 125 - 175 mil thickness to provide chemical and abrasion protection to concrete or steel substrates.

Additional available systems are as follows:

TL-94AR incorporates ceramic fillers for wear and erosion resistance.

TL-94C incorporates carbon fillers for fluoride and caustic service.

The TL-94 systems consists of a primer, followed by a trowel applied, monolithic mortar liner with an optional gel coat for a smooth surface.

TYPICAL USES

Blome TL-94 is a heavy duty lining system that provides a tough, impact resistant surface that is resistant to a wide variety of aggressive chemicals found in many industrial plants. TL-94 is typically used to line tanks, vessels, stacks, ductwork, sumps and trenches handling or processing various chemicals, flue gas, slurries, pulp stock or corrosive effluent streams. Because of the system's wear and impact resistance is also ideally suited for protecting concrete pads, equipment bases, cove bases, walls and other structures exposed to aggressive chemicals.

HANDLING CHARACTERISTICS

The TL-94 monolithic liner is applied by trowel at specified thickness. When mixed the material has a creamy consistency, ideal for vertical and overhead installations up to a 175 mil thickness. A short nap roller slightly dampened with IPA or MEK is typically used to backroll the troweled liner to remove trowel marks and smooth the surface.

TYPICAL PROPERTIES

| PROPERTY | TL-94 |
|------------------------------------|----------------------------------|
| Tensile strength ASTM C-307-83 | 2,420 psi |
| Compressive strength ASTM C-579-82 | 10,600 psi |
| Coefficient of thermal expansion | 17.0 x 10 ⁻⁶ in/in/°F |
| Color* | Gray |

*carbon filled systems are only available in black

PACKAGING & COVERAGE

TL-94 is a three component system consisting of part A (resin), part B (hardener) and either Blome 410, 410C or AR-1 Filler Powder.

| Component | Packaging Size | Coverage |
|------------------------------|-------------------------------------|--|
| TL-94 Resin & Hardener | 1 gallon unit 5 gallon unit | 30 sq. ft./gallon |
| 410 Filler Powder | 50 lb. bag (add 25-28 lbs./gal.) | 60 sq. ft./bag (for nominal 150 mil thick liner) |
| 410C Filler Powder (carbon) | 50 lb. bag (add 22-26 lbs./gal.) | 50 sq. ft./bag (for nominal 150 mil thick liner) |
| AR-1 Filler Powder (ceramic) | 50 lb. bag (add 35 lbs./gal.) | 40 sq. ft./bag (for nominal 150 mil thick liner) |

**POT LIFE AND CURE
SCHEDULE @ 75°F***

| Product | Pot life | Recoat | Chemical service |
|--------------------------|-----------------|--|-------------------------|
| Primer 75 | 30 - 40 minutes | Min. 2 hrs. Max. 24 hours | N/A |
| TL-94 Liner | 20-30 minutes | Minimum 2 hour before installing optional gelcoat. Maximum 24 hours | 48 hours |
| TL-94 Gelcoat (Optional) | 20-30 minutes | N/A | 48 hours |

*These materials may be applied between 50 - 90°F. The pot life will be longer in lower temperature range & shorter in higher temperature range.

BID SPECIFICATION GUIDE

Use Blome TL-94 (designate either standard product, AR or C Grade) consisting of a 125-175 mil liner applied by trowel over properly prepared and primed substrate.

**APPLICATION GUIDELINES
STORAGE OF MATERIALS**

Proper storage of these materials is critical to handling characteristics and performance. Store all components in unopened containers in a dry place, at 50-75°F, out of direct sunlight, and protect from the elements. Keep away from heat and flame. 24 hours before use, narrow the storage temperature to 70-80°F to facilitate handling of the product. This product has a shelf life of 12 months when properly stored.

**JOB SITE ENVIRONMENTAL
CONDITIONS**

The temperature of the surface to be lined and the ambient air temperature must be at least 50°F while applying this product and as it cures. Monitor weather conditions and dew point. Stop the application if the temperature falls within 5°F of the dew point. Use dehumidification and/or temperature control if necessary to meet this requirement.

SURFACE PREPARATION

STEEL: Steel surfaces intended for lining application must be clean and free of oil, grease, dirt, rust, mill scale, all soluble salts, other coatings, corrosion products and other deleterious substances. Welds and weld splatter must be ground smooth. Avoid skip welds. Grind all sharp projections and round all corners to 1/8" radius. All steel to be lined must be abrasive blasted to white metal finish (NACE no. 1, SSPC-SP5) with a 2-4-mil sharp anchor profile. Mask all areas that are not to be lined.
CONCRETE: New concrete must cure a minimum of 28 days. Concrete surfaces should be abrasive blasted to provide a sound surface with a texture similar to medium grit sandpaper. Surfaces must be dry.

PRIMING/SURFACE REPAIR:

Mix and apply Primer 75 by brush or roller. Apply specified primer at 6-8 mils. Do not allow primer to puddle. Coverage rate should be 175-200 square feet per gallon. Allow primer to cure for at least two hours before proceeding with application of TL-94 Trowelable Liner.
When priming concrete, it is important to apply the primer when ambient and substrate temperatures are declining. Apply sufficient amount of primer to seal the surface of the concrete without creating puddles. Evenly apply specified primer and allow primer to cure tack free before proceeding with application of the TL-94 lining system. Prior to installing troweled liner on concrete substrates, all bugholes or form voids must be filled using a mortar or patching putty comprised of specified primer filled with Blome 410 Powder to a putty consistency.

MIXING AND APPLICATION

Blome TL-94 Trowelable Lining is a mortar mix. You will need an empty, clean five-gallon pail and a mixing drill with a mixing paddle attached. Mix TL-94 resin and hardener at a 4:1 ratio by volume. Mix components together for 1-2 minutes; slowly add Blome 410 (or 410C or AR-1) Filler Powder to the mixed resin and hardener and blend thoroughly. Immediately apply mixed mortar liner to prepared and primed surface using a flat trowel, preferably with rounded corners, dry wall blade or plaster trowel. Apply at an even thickness of 125-175 mils. Following trowel application, the surface of the liner is typically backrolled with a short nap roller that is lightly dampened with IPA or MEK to remove trowel marks and smooth the surface of the liner. If the optional gel coat is used, allow lining to cure for at least 2 hours and not more than 24 hours and roller apply gel coat of TL-94 Resin and Hardener at a rate of 150 square feet per gallon.

TOUCH UP OR RE-COATING

Inter-coat prep for touch up or re-coating requires that the surface be clean, dry and roughened by sanding, grinding or abrasive blasting. Touch up or recoat as needed using TL-94 materials.

CLEANUP

Clean tools and equipment with nonflammable solvents before material begins to set.

SAFETY PRECAUTIONS

The various components of TL-94 products present health and safety hazards if they are handled improperly. Do not store, mix or use near open flame, sparks or heat source. Keep all containers closed when not in use. Always wear safety glasses, proper respirator, protective clothing and rubber gloves while mixing or applying these products. Refer to Material Safety Data Sheet prior to using these products.

CAUTION

TL-94 may cause skin irritation with prolonged or repeated contact. Handle with care and read 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 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.

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Supersedes all previous literature