

## TL-1255 FDA Epoxy Tank Lining

### DESCRIPTION AND USES

Blome TL-1255 is a 100% solids, single coat, FDA epoxy tank lining designed primarily for direct food contact in liquid food grade service. TL-1255 is applied using plural spray apparatus at a nominal 10-12 mil thickness directly over properly prepared steel substrates. Excellent bonding qualities, superior flexibility and single coat application make TL-1255 ideal for use as a high-performance tank lining. TL-1255 is a two-component product with a 1:1 volumetric mix ratio.

TL-1255 possesses the following characteristics:

Suitable for direct food contact;

Meets the requirements of CFR175.300

**(compositional & extraction requirements certified by independent test lab)**

Low odor;

Excellent chemical resistance;

High bond and cohesive strength;

Low permeability;

Good flexibility;

Passes multiple hot water wash tests with no delamination;

Unique blush resistant formulation.

Typical uses include:

Liquid food grade cargos;

Dry bulk cargos;

Stationary tanks with FDA requirements.

### PACKAGING/COVERAGE

TL-1255 is available in 10-gallon units. Each unit consists of pre-measured Part A and Part B components. Application thickness may vary from 10-15 mils. Touchup kits are available.

Coverage rates will be affected by the condition of surface being coated (degraded vs. smooth, steel vs. concrete, etc.). To figure theoretical coverage per gallon divide desired mil thickness into 1,604. (For example, theoretical coverage for a 12 mil thickness is: 1,604 divided by 12 = 133.66 square feet per gallon.) For practical coverage, make necessary allowances for condition of the substrate, temperatures, jobsite conditions, waste, overspray, etc.

### TYPICAL PROPERTIES -WET

Solids by Volume	100%
Weight per Mixed Gallon:	9.66 lbs.
*Pot Life @ 75°F:	22 minutes
Cure Times @ 75°F Dry to Touch:	8 hrs.
Firm:	14 hrs.
Heat Cure Schedule for FDA applications:	200°F for 2 hours
Chemical Service:	72 hrs.
Primer:	Not required
Flammability:	Nonflammable

\*Significantly less at elevated temperatures and in large mass quantities.

## TYPICAL PROPERTIES-CURED

	Color	Blue (other colors available upon request)
Hardness - ASTM D-2240 Shore D:		68 - 70
Bond Strength - ASTM D-4541:		Concrete: failure in concrete
		Steel: 1,750 psi
Water Vapor Transmission - ASTM E-96:		WVT: 0.0120 grain per hr ft <sup>2</sup>
	Permeability:	0.005 perm. in.

## STORAGE AND SHELF LIFE

Keep TL-1255 components tightly sealed in their original containers until ready for use. Store at 50°F to 75°F and out of direct sunlight. For applications on vertical surfaces, use within four months of manufacture date.

## APPLICATION GUIDELINES

### TEMPERATURE CONSIDERATIONS

1. The temperature of the surface to be coated, and the ambient air temperature, should be at least 55°F while applying TL-1255 and while it cures. If you wish to attempt to apply TL-1255 in cooler temperatures, tarp and heat the substrate to be coated to create and maintain the minimum 55°F conditions.
2. Do not apply TL-1255 if the temperature is within 5°F of the dew point.
3. Prior to application, components A and B should be preheated and maintained at a minimum temperature of 125°F - 135°F to facilitate pumping and spraying.

### SURFACE PREPARATION -GENERAL

Surfaces must be dry and free of dirt, dust, oil, grease, chemicals and contaminants immediately prior to applying TL-1255.

### SURFACE PREPARATION OF STEEL

1. Steel in Immersion Service
  - a. Abrasive blast steel surfaces to a white metal finish with a 2 to 3 mil anchor profile. (Ref. SSPC-SP-5)
  - b. All welds should be continuous and should be ground to remove sharp edges, laps, under cuts and other surface irregularities. Relatively smooth, ripple finished welds are acceptable. Stripe-coat all welds just prior to applying coating. (Refer to NACE Standard RP0178-95.)
2. Steel in Non-Immersion Service  
Abrasive blast steel surfaces to a commercial blast with 1 to 2 mil anchor profile. (Ref. SSPC-SP-6)

### MASKING

Mask surfaces that are not to be coated. TL-1255 is difficult to remove, once cured.

### PRIMING

Steel priming is not required. Consult Blome International for specific recommendations.

## **TOUCHUP**

Consult Blome International Technical Services for procedures.

## **APPLICATION EQUIPMENT**

TL-1255 is applied using a 1:1 fixed ratio plural spray rig. Consult Blome International for specific requirements.

## **CARE OF SPRAY RIG HOSES**

Take care to prevent the mixed material from setting up in your whip hose or gun. For best results, keep hoses as short as possible and purge hoses immediately if work is interrupted for more than a few minutes. Keep whip hose and gun out of direct sunlight and away from hot surfaces for best results. Insulated hoses are recommended to maintain operation.

## **MIXING AND APPLICATION**

1. The components must be individually agitated immediately prior to use:
  - a. Part A - Blend each Part A component to a uniform consistency in its individual container.
  - b. Part B - Stir each Part B component to a uniform color in its individual container.
2. Material should be applied in an even coat  
When spraying, use multidirectional passes to ensure positive coverage and a proper film build of 10 - 12 mils.
3. Coating Thickness
  - a. Horizontal Surfaces: Minimum 8 mil and maximum 15 mil thickness may be applied to horizontal surfaces in a single coat.
  - b. Vertical Surfaces: Minimum 8 mil and maximum 15 mil thickness may be applied to vertical surfaces in a single coat. Thickness in excess of 18 mils per coat is not recommended.

## **HOLIDAY TESTING STEEL**

Holiday testing is recommended for coated steel in immersion service.

## **CLEANUP**

When cleaning individual, unmixed components or before mixed material gels, tools and equipment should be cleaned using hot, soapy water. After mixed TL-1255 begins to cure, xylene or MEK will be required. Consult Blome International for alternate solvents for cleanup.

## **SAFETY PRECAUTIONS**

### **FOR INDUSTRIAL USE ONLY**

Avoid contact with skin and eyes; do not ingest material or inhale vapors.

When mixing or applying TL-1255, always wear chemical goggles, appropriate rubber gloves, and other appropriate safety clothing.

When spraying in confined areas, wear a fresh air hood and make provisions for forced air ventilation.

When spraying in open areas, a NIOSH approved respirator suitable for organic vapors can replace fresh air hood.

Prolonged or repeated exposure to the Part A and Part B components of TL-1255 may cause skin irritation and/or allergic reactions.

Refer to Blome material safety data sheets on individual components.

**CAUTION**

TL-1255 may cause skin irritation with prolonged or repeated contact. Handle with care and read the safety data sheet, which is available for each product.

**CURE SCHEDULE**

For Liquid Food Grade Product:

- Ventilate car for thirty (30) minutes with fresh air at a minimum temperature of 75°F.
- Heat cure by raising the substrate temperature 15 degrees every 30 minutes until the substrate reaches 200°F.
- Maintain substrate temperature at 200°F for two (2) hours.

**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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