TL-220S MR
Glass Mat Reinforced Vinyl Ester Lining System

PRODUCT DESCRIPTION

TL-220 S MR system consists of a primer, single or multiple reinforced layers of chopped strand fiberglass mat saturated with the appropriate resin and a gel-coat. TL-220 S MR is based on a vinyl ester resin. This versatile system can be applied as a roller/spray system or can be used in conjunction with the Blome Trowel applied 1/16 in. thick (40-80 mils) vinyl ester mortar.

TYPICAL USES:

TL-220 S MR Series products are heavy duty, reinforced lining systems that are crack and impact resistant. TL-220 S MR is typically used to line steel and concrete tanks holding or processing various chemicals. Because of the systems wear resistance, impact resistance and crack bridging qualities it is also ideally suited for protecting storage tank bottoms, concrete floors, walls, trenches and sumps exposed to aggressive chemicals.

HANDLING CHARACTERISTICS:

The primer is spray or roller applied. The saturant for the glass reinforcement and the topcoat material is applied by roller. Trowel application is used if the mortar coat is chosen as the base.

PACKAGING & COVERAGE

TL-220 S MR is a multi component system consisting of Part A (resin) and Part B (catalyst) chopped strand mat or scrim cloth and a TL-220 S MR PGC parifinned gel coat resin and catalyst. (gel coat may not be required) 410 powder is used along with TL-400 resin for trowel base coat.

POT LIFE AND CURE SCHEDULE @ 75°F*

<table>
<thead>
<tr>
<th>Product</th>
<th>Pot life</th>
<th>Recoat</th>
<th>Chemical Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primer 205</td>
<td>15-20 MINUTES</td>
<td>Min. 4 hrs, max. 48 hrs</td>
<td>N/A</td>
</tr>
<tr>
<td>TL-220 S MR (basecoat, saturant and gelcoat)</td>
<td>20-30 MINUTES</td>
<td>Basecoat: min. N/A** max. 30 – 40 min. Saturant: min. 5 hrs, max. 48 hrs. Gelcoat: min. 4 hrs max. 24 hrs</td>
<td>FINISHED SYSTEM: 48 HOURS</td>
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*These materials may be applied between 50°F – 90°F. The pot life will be longer at the lower temperature range and much shorter at the higher temperature range.

** Basecoat must be covered with glass mat and glass mat must be saturated before basecoat begins to gel.
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°F-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°F-80°F to facilitate handling of the product. This product has a shelf life of 3 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, 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 a 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.

PRIMING/SURFACE REPAIR:

Mix and apply Primer 205 by brush, roller or spray. Apply at 6-8 mils. Do not allow primer to puddle. Coverage rate should be 200 – 250 square feet per gallon. Allow primer to cure tack free before proceeding with application of TL-220 S MR or mortar coat.

MIXING AND APPLICATION

Important note: Plan your work carefully. Pre-cut reinforcing mat into easy to handle pieces. It’s a good idea to have at least a couple of pair of metal spiked shoes such as golf shoes on hand so that crew members can walk onto the wet basecoat without disturbing it and address minor problems that cannot otherwise be reached. Cover just enough area with basecoat that can be finished with glass and saturant coat before the basecoat begins to set. Areas in direct sunlight and in a warm environment will set much faster than shaded, cool areas. Also, working in direct sunlight may cause pinholes and bubbles to form in the basecoat.

TL 220 S MR Base Coat: Mix TL-220 S MR resin and catalyst together for 1-2 minutes, and blend thoroughly. Immediately apply to prepared and primed surface using a roller or brush. Apply at an even thickness of 40-45 mils (approximately 34 square feet per gallon). As soon as an area is covered with the TL-220 S MR and before it begins to set up or gel, imbed a layer of Blome chopped strand mat using a dry short nap or a ribbed roller to press the glass into the wet basecoat. Overlap seams of glass a min. of two inches. (Consult Blome for installation guidelines if Mortar coat using TL-400 resin and 410 powder is required)

TL-220 S MR Saturant Topcoat: Mix the Part A resin and Part B catalyst in a clean 5-gallon pail. Immediately apply saturant to the glass reinforcement with TL-220 S MR using a medium nap roller. Apply saturant coat at an approximate rate of 34 square feet per gallon (40 mils dft). Work from the pail dipping the roller into the resin and applying in even coats to
saturate the glass. DO NOT pour the resin onto the surface as this will greatly reduce coverage rates. Spray application is acceptable. Glass reinforcement is saturated when the silver color of the glass disappears. Allow to cure.

TOUCH UP OR RECOATING

Inter-coat prep for touch-up or recoating requires that the surface be clean, dry and roughened by sanding, grinding or abrasive blasting. Touch up or recoat as needed using TL-220 S MR materials.

CLEANUP

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

SAFETY PRECAUTIONS

The various components of TL-220 S MR 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-220 S MR 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.