

## Product Data Sheet

### DESCRIPTION:

2900 LS is a monolithic, trowel applied, epoxy lining system used in elevated temperature applications. 2900 LS provides excellent protection against corrosion and abrasion in service temperatures up to 350°F. Because 2900 LS is monolithic, commodity hang-up is reduced and it is easier to keep clean.

### ADVANTAGES:

- Excellent Chemical Resistance
- Applicator Friendly – Easy To Apply
- Excellent Adhesion.
- Short Downtime – Quick Cure
- Excellent Abrasion Resistance.
- Cost Effective
- U.S.D.A Acceptable

### USES:

- Chemical Tanks, Pits, Sumps
- Smoke Stacks
- Wet Scrubbers
- Elevated Temperature Storage Vessels
- Pump Casings
- Slurry Tanks
- Waste Neutralization Pits
- Sand Hoppers and Troughs

### SUPPLEMENTAL PRODUCTS:

- 2900 LS - Primer and Veil Coat
- 3500 Grout -Horizontal Pitching and Filler
- 3300 Series Floorings Adjacent Floor Areas
- 3300 CR Veil Coat

### PACKAGING AND COVERAGE:

2900 LS – Liner System - packaged in batches consisting of the following -

**2900 LS – Primer** – covers approximately 30 square feet at 10 mils and consists of the following –

1 container - Part A (resin)

1 container - Part B (hardener)

**2900 LS – Mortar** – covers approximately 10 square feet at 1/8 inch, and consists of the following –

1 container - Part A (resin)

1 container - Part B (hardener)

1 bag - Part C (chemical resistant aggregate)

**2900 LS – Veil Coat** – covers approximately 30 square feet at 10 mils, and consists of the following -

1 container - Part A (resin)

1 container - Part B (hardener)

### PROPERTIES:

<b>Compressive Strength (ASTM C-579) &lt;resin&gt;:</b>	15,7000 psi	<b>Flammability (ASTM D-635):</b>	Does not support combustion
<b>Tensile Strength (ASTM C-307) &lt;resin&gt;:</b>	11,000 psi	<b>Water Absorption (ASTM D-570):</b>	0.038%
<b>Bond Strength (ASTM C-321):</b>	Greater than 350 psi, 100% concrete failure	<b>Working Time at (ASTM C-308):</b>	25-35 min; 75°F (24°C)
<b>Bond Strength (on steel):</b>	3500 psi	<b>Maximum Immersion Temperature:</b>	195°F (90.6°C)
<b>Coefficient of Thermal Expansion:</b>	1.2x10 <sup>-5</sup> in./in./°F	<b>Shelf Life:</b>	1 year
<b>Thermal Shock (10 cycles):</b>	No disbondment (-20°F to 75°F (-20°C to 24°C); 32°F to 212°F (0°C to 100°C)	<b>Solids by Content:</b>	By weight: 100% By volume: 100%
<b>Indentation (MIL-D-3134F):</b>	No indentation	<b>Impact Strength:</b>	100in./lbs.

### SURFACE PREPARATION:

2900 LS may be installed only on clean, sound substrates  
Concrete:

New concrete must be cured a minimum of 28 days. All coatings, oils, grease and unsound concrete must be removed. Concrete surfaces must then be acid etched, scarified or shot blasted to remove surface laitance. A good bonding tooth, the texture of 60 grit sandpaper, is desired for maximum adhesion, with removal of all surface glaze.

#### Metal Surfaces:

Blast the surface to near white SSPC-SP10-70 or NACE No. 2 using a Venturi blast nozzle with 100 psi air. To produce the proper 4 mil anchor profile, the blast media should be properly graded, clean, sharp, and angular, similar to Humble Abrasive Flint #7 (6-30) mesh, or Steel Grit (HG25).

**MIXING:**

Prior to starting, materials should be stored at 70°F (21°C) for at least 48 hours.

**Primer** - Empty entire contents of Part B into Part A and stir thoroughly for 2 minutes.

**Mortar** - Empty entire contents of Part B into Part A and stir thoroughly for 2 minutes. Slowly add the entire contents of Part C and mix for another 1-1/2 to 2 minutes.

**Veil Coat** - Empty entire contents of Part B into Part A and stir thoroughly for 2 minutes.

As with all two-component systems, apply immediately after mixing, as the exotherm will increase over time. The working time of the mortar will substantially be reduced if the material is left in a pail.

**APPLICATION:**

Substrate temperature should be 65°-85°F (18°-29°C) during application, and for 96 hours thereafter for complete cure. Do not apply if surface temperature is below 60°F (16°C). First apply the primer to the surface in a thin, even layer with a roller, and then pull the excess down with a squeegee. Prime only the areas you plan to trowel within 2-3 hours. Using a trowel apply the mortar evenly over the surface using firm pressure, filling in low spots as you go. Remove large surface marks by cleaning the trowel and quickly going over the surface with light pressure. Allow mortar to set 2-3 hours or until hardened to the touch. Knock off any surface nubs with a carbide block or grinder. Spread the veil coat over the surface with a roller and pull down excess material with a squeegee.

**CURE TIME:**

2900 LS will harden within 4-6 hours; however, 96 hours of cure at 75°F (24°C) is recommended for chemical spills. Cure can be accelerated by introducing heat to the substrate. Do not heat over 120°F (49°C), and increase substrate temperature at a rate of no more than 20°F (7°C) per hour.

**CLEANUP:**

Cured or hardened 2900 LS will bond to practically all surfaces and is extremely difficult to remove. Clean all tools and mixer immediately after use with acetone or other solvent based cleaners.

**SAFETY:**

Avoid skin contact. If eye contact occurs, flush with water and consult a physician immediately. Keep work areas well ventilated. Never seal a container of mixed Part A and B as the continuing exothermic reaction may cause container to explode. 2900 LS Material Safety Data Sheets are available upon request.

**Limited Warranty**

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C

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