

**PRODUCT INFORMATION SHEET**  
**6800 LINING SYSTEM**  
**1/8" CHEMICAL RESISTANT LINER**

**DESCRIPTION:**

6800 LS is a monolithic lining system, trowel applied at a minimum 1/8" thickness to the interior of tanks and other surfaces. It is formulated with chemical resistant resins and fillers to withstand attack from concentrated acids, caustic, bleaches, and some solvents. 6800 LS can be applied to horizontal, vertical, and overhead surfaces without sagging. It can withstand temperatures up to 210°F.

**ADVANTAGES:**

- Excellent Chemical Resistance.
- Monolithic Surface
- Durable – Wear Resistant Matrix
- Excellent Adhesion to Concrete Or Steel
- Quick Cure – Short Down Times
- Applicator Friendly – Easy To Apply
- U.S.D.A Acceptable

**USES:**

- Bleach Plant Trenches and Pits
- Acid Plant Concentrator Areas
- Plating and Metal Refining Tanks
- Acetic Acid Production Areas
- Caustic/Chlorine Plants
- Neutralization Basins
- Pharmaceutical Plants
- Chemical Secondary Containment

**SUPPLEMENTAL PRODUCTS:**

- ULTRAPRIME – Penetrating Primer
- 5500 Grout – Horizontal Patching and Filler
- 6800 FS Series Floorings – Adjacent Floorings.
- 6850 CS Coating – Walls and Specialty.

**PACKAGING AND COVERAGE:**

6800 LS – Liner System - packaged in batches -

**6800 LS – Primer** – covers approximately 30 square feet at 10 mils and consists of the following –

1 container – Part A (resin)

1 container – Part B (catalyst)

**6800 LS – Liner** – covers approximately 10 square feet at 1/8 inch and includes the following –

1 container – Part A (resin)

1 container – Part B (catalyst)

1 bag – Part C – (chemical resistant aggregate)

**6800 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 (catalyst)

**PROPERTIES:**

<b>Compressive Strength</b>	16,000 psi ASTM C-579 (resin)
<b>Tensile Strength</b>	13,300 psi ASTM C-307 (resin)
<b>Bond Strength</b>	Greater than 350 psi 100% concrete failure ASTM C-321
<b>Bond Strength (on Steel)</b>	3300 psi
<b>Coefficient of Thermal Expansion</b>	1.2 x 10 <sup>-5</sup> in./in./°F
<b>Impact Strength</b>	100 in./lbs.
<b>Indentation</b>	No indentation MIL-D-3134F
<b>Abrasion Resistance</b>	29 milligrams ASTM D-1044
<b>Water Absorption</b>	0.025% ASTM D-570
<b>Working Time at 75°F (24°C)</b>	20-30 minutes ASTM C-308
<b>Maximum Immersion Temperature</b>	210°F (99°C)
<b>Shelf Life</b>	6 months
<b>Color</b>	Gray
<b>Solids by Content</b>	By Weight 96% By Volume 96%

### **SURFACE PREPARATION:**

6800 LS may be installed only on clean, sound surfaces.

Concrete:

New concrete must be cured a minimum of 28 days. All coatings, oils, grease and unsound concrete substrate must be removed. Concrete surfaces must then be acid etched, scarified or blasted to remove surface laitance.

A good bonding tooth, the texture of 60 grit sandpaper, is desired for adhesion, with the removal of all surface glaze.

For 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.

**ULTRAPRIME** (for concrete surfaces only) - is a single component product applied to concrete to protect the liner from moisture contamination.

**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.

Do not allow the mortar to sit in a pail as this will substantially reduce the working time of the material.

### **APPLICATION:**

Substrate temperatures should be at 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). On concrete surfaces, first apply ULTRAPRIME - Penetrating Moisture Cure Primer. Roll out as thin as possible and allow to set for approximately 30-45 minutes (or until tacky). Apply 6800 LS 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. Spread mortar evenly over the surface firmly, in a long wiping motion, filling in low spots as you go. Remove large surface marks by cleaning 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 as thin as possible with a squeegee.

### **CURE TIME:**

6800 LS will harden within 2-3 hours; however, 96 hours cure at 75°F (24°C) is recommended for chemical spills. Cure can be accelerated by introducing heat to tank. Do not heat over 120°F (49°C), and only increase at a rate of 20°F (7°C) per hour. Caution: 6800 LS fumes are flammable.

### **CLEANUP:**

Cured or hardened 6800 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 reaction may cause container to explode. 6800 LS is manufactured using a styrene monomer which will give off an odor during application. Customer is responsible for protecting employees and food products from these odors. Cured product poses no threat of odor contamination. 6800 LS Material Safety Data Sheets are available upon request.

### **IMPORTANT NOTICE TO PURCHASER:**

**The following is made in lieu of all warranties, expressed or implied. Seller and manufacturer's only obligation shall be to replace such quantities of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential arising out of the use of or inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risks and liability whatsoever in connection therewith. The foregoing may not be altered unless written authorization is received from PROTECTIVE FLOORINGS AND LININGS, A DIVISION OF A. W. CHESTERTON.**