



# EpoxySystems' Product #643

## Highly Chemical Resistant Novolac Epoxy Coating

### **DESCRIPTION**

**PRODUCT #643 Highly Chemical Resistant Coating** is a solvent free, high functionality Novolac epoxy coating suitable for immersion and non-immersion service. Designed specifically as a Methanol resistant coating, **PRODUCT #643** is well suited for protection in a wide array of aggressive acids, alkalies and organic solvents. **PRODUCT #643** produces a tough, chemical resistant coating on ferrous and non-ferrous metals and concrete.

### **WHERE TO USE**

- **Methanol Pumps**
- **Pipes**
- **Industrial Floorings**
- **Excellent where force cure is not available**
- **Tanks**
- **Aggressive Chemical Tank Linings**
- **Secondary Containment Areas**

### **SURFACE PREPARATION**

Steel surfaces are to be abrasive blasted with chloride free abrasive. Exterior applications to SSPC SP-6 commercial gray metal finish. Immersion applications to SSPC SP-5 white metal. Grind flat all burrs, weld seams, radius sharp edges. Fresh blasted surfaces to be primed with **PRODUCT #843**.

Concrete surfaces should be degreased if oil and grease contamination is present. Degreased surface shall be high pressure washed, acid etched and high pressure washed again so surface is clean and free of all grease, oils and surface laitance. Existing coating should be abrasive blasted to clean concrete. Prime with Product #843.

### **MIXING**

Thoroughly mix Activator into Base with mixing stick or drill with low speed mixing blade. Mix by volume 2 parts Base to 1 part Activator.

### **APPLICATION**

**Brush:** Use medium to stiff bristle of sufficient quality that bristles do not pull out and stick in coating. Trim or tape to 1" nap.

**Roller:** Use good quality 1/8" nap, 1/4" on concrete.

**Plural Spray:** Use .019 - .021 tip, 2,000 - 2,500 psi, heat to 120 °F Base, 110 °F Activator.

**Airless Spray:** Use .019 - .023 tip, 2,000 - 2,500 psi with in-line heater only (Caution: Short Pot Life) Conventional Spray: Not Recommended

All spray equipment should employ traps to prevent water and oil from contaminating coating and screens to prevent particulate contamination. Never thin.

### **TEMPERATURE**

**Material:** Keep between 55 - 95 °F (13 - 35 °C). **Substrate:** Keep between 45 - 105 °F (7 - 40 °C). The difference in temperature of the substrate and the coating should never exceed 10 °F, 5 °C.

### **CURE TIME**

Brush or roller, recoat between 6 and 14 hours at 77 °F, 25 °C. Spraying recoat between 3 and 14 hours. Full cure before immersion 7 days at 77 °F. Force Cure: 12 hours at 150 °F, 66 °C; 6 hours at 250 °F, 121 °C.

**CLEAN-UP:** M.E.K. or similar

## **PHYSICAL PROPERTIES**

<b>Temperature:</b>	<b>Immersion Service</b>	<b>Max. 350 °F Spike to 400 °F (3 hrs.)</b>
Recommended Force Cure	200 °F 6 hrs.	
Chemical Resistance:	Water	Excellent
	Alkalies	Excellent
	Inorganic Acids	Excellent
	Organic Acids	Good
	Organic Solvents	Excellent
Abrasion	Very Good	
Flexibility	Good Very good with fiberglass Mat at 1.5 oz./ft. <sup>2</sup>	
Film Thickness Exterior	20 mils per coat (.51 mm) 2 coats, immersion 2-3 coats	
Solids by Volume	100%	
Viscosity	60,000 - 70,000 cps	
Pot Life	10 min. per gallon @ 72 °F	
Mix Ratio	2:1 by volume (Base: Activator) 100 gm: 74.5 gm by weight	
Color	Red	
Shelf Life	3 years at 55-95 °F, 13-35 °C	
Coverage	80 ft. <sup>2</sup> per gallon per coat (theoretical) 7.5 m <sup>2</sup> per gallon per coat	

**CAUTION: “A” Component contains epoxy resin. DANGER! “B” Component contains alkaline amines; strong sensitizer. May cause skin sensitization or other allergic responses. Use with good ventilation, particularly if material is heated or sprayed. Prevent all contact with skin or eyes. Wear protective clothing, goggles, gloves and/or barrier creams. Keep container closed when not in use. Wash thoroughly after handling.**

**FIRST AID:** In case of skin contact, immediately wash with soap and water. in case of eye contact, flush eyes with copious amounts of water for at least fifteen (15) minutes. Remove contaminated clothing shoes. If irritation persists, seek medical attention. Wash clothing before reuse.

**FOR INDUSTRIAL USE ONLY  
KEEP AWAY FROM CHILDREN**

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