

# SURFACE TOLERANT CHEMICAL RESISTANT BARRIER COATING

# PRODUCT INFOMATION SHEET

#### **DESCRIPTION:**

EMSOL® ST-3000 is 100% solids, high performance novolac epoxy coating featuring superior chemical and abrasion resistance with a Kevlar reinforced finish that will withstand severe abuse. EMSOL® ST-3000 can be applied to surfaces above and below the water line, bonds to concrete (wet & dry), steel and wood surfaces.

### **TYPICAL USES:**

Most corrosive environments Marine, chemical, pulp & paper Spillways, piping, pilings, columns Excellent as a finish top coat

## VISCOSITY (@72°F):

Mixed: 12200 cps

#### COLORS:

Standard Gray, Black, White Other colors may be available

### **FEATURES:**

Resistant to most corrosive chemicals Non-blushing & non- water spotting Can be applied underwater Non-corrosive, non-hazardous Applied over metallic and cementitious substrates both wet and dry

### **MIX RATIO BY VOLUME:**

5 parts A to 3 parts B (by volume)

#### **CURE SCHEDULE:**

Pot life @75°F: 25 minutes

Tack free: 4 hours Light Service: 14 hours Full Service: 3 days

# **PHYSICAL PROPERTIES:**

Compressive Strength	ASTM D695	10,800 psi
Tensile Strength	ASTM D638	4,900 psi
Elongation at Break	ASTM D638	25 %
Abrasion Resistance		
CS-17 Wheel, 1 kg load	ASTM D4060	0.14 gm loss
Water Absorption (2 hour Boil)	ASTM D570	0.14%
Flexural Strength	ASTM D790	6,700 psi
Shore D Hardness	ASTM D2240	90
Heat Distortion Temperature	ASTM D648	130°F
Bond Strength to Concrete		100% concrete failure
Solids by Volume		100%
Shelf Life		1 year
Theoretical Spread Rate		100 sq. ft. @ 16 mils

#### CHEMICAL RESISTANCE GUIDELINES 1 = constant immersion 2 = intermittent immersion 3 = secondary containment (72 hours) 4 = splash & spill ACIDS: **ALKALIES:** Acetic 1-10% Ammonium Hydroxide 3 all 1 Acetic 10-100% 4 Calcium Chloride all 1 3 Chromic 1-10% Calcium Hypochlorite 2 all 2 Citric all Caustic Soda all 1 4 Caustic Potash 1 Cresylic all all 2 Hydrochloric Sodium Hypochlorite 1-15% 2 all Lactic 1-30% 3 Sodium Hypochlorite 1-30% 4 Lactic 31-50% 4 Sodium Hydroxide 1 all 3 Sodium Sulfide 2 Nitric 1-10% all Nitric 11-40% 4 2 Oxalic 1-30% WATER: Phosphoric 2 all Salt 1 1 Sulfuric 1-50% Fresh 1 2 2 Sulfuric 51-98% Deionized X-ray solution 4 Sewer, Sludge 2 SOLVENTS: Acetone 4 **MISCELLANEOUS:** Skydrol®Fluids 2 Benzene 4 **Butyl Cellosolve** 3 Bleach 2 2 Ethanol Water all 1 MEK 4 Oils, grease 1 2 Methanol Gas. Jet Fuels 3 2 4 Toluene Salts

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EMSOL ST-3000 DS ENG REV 040917