

SYNTHO-SUBSEA™ EPOXY

UNDERWATER EPOXY MASTIC SEALANT, FILLING, AND PATCHING SYSTEM



Description

Syntho-SubSea™ Epoxy is a two-component, Kevlar®-reinforced, epoxy mastic coating for sealing and repairing leaks in pipelines. It is also used for corrosion and erosion protection in the splash zone or tidal areas. Ideal for patching, sealing, and coating a wide variety of materials, including steel, concrete, wood, aluminum, and fiberglass, and easy to use as an adhesive or coating on both wet surfaces and underwater. This versatile epoxy system is reinforced with Kevlar to achieve high-performance characteristics such as excellent adhesion, resistance to high pressures, resistance to high and low temperature extremes, as well as outstanding resistance to petroleum products and chemicals. This product can also be used for aboveground and belowground applications. The sister product, Syntho-Subsea™ LV Epoxy, is available if a lower viscosity is required.

Kit #	Pre-weighted	Volume
SUB01	1 lb.	1/4 Quart
SUB04	4 lbs.	1 Quart
SUB10	10 lbs.	1 Gallon
SUB50	50 lbs.	5 Gallons



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Typical Applications

- Seal leaks in subsea pipelines, joints, and fittings
- Fill in anomalies, voids, and surface imperfections on pipelines
- Protective corrosion coating in splash zone and tidal prone areas
- Adhesive, protective coating on wet surfaces or underwater
- Pipeline anomaly reinforcement and remediation
- Application Method: Putty knife, spatula, or trowel

Physical Properties

Color: Resin – Blue, Curing Agent – Yellow
 Coverage, 30 mils: 5 sq. ft./16 oz. kit
 Pot Life at 77°F (25°C): 60 minutes
 Spreading Rate/Gallon: 30 mils
 Dry Time: 24 hours
 Compression Strength: 7,380 PSI (51 MPa)
 Tensile Strength: 7,600 PSI (52.4 MPa)
 Flexural Modulus: 13,600 PSI (94 MPa)
 Flexible Strength: 13,000 PSI (90 MPa)
 Solids Content: 100%
 Maximum Use Temperature: 200°F (93°C)
 Cure Time: 24 hrs. at 75°F (24°C)
 Minimum Use Temperature: -50°F (-45°C)
 Storage Conditions: Cool, dry place



SYNTHO-SUBSEA™ LV EPOXY

UNDERWATER EPOXY MASTIC SEALANT, FILLING, AND PATCHING SYSTEM



Description

Syntho-Subsea™ LV Epoxy is a unique blend of liquid epoxy, polymer, and aliphatic polyamine curing agents that is able to displace water from wet surfaces in order to make a permanent bond. The formulation is solvent-free to ensure safety and maximum technical performance. Kevlar® fibers are incorporated for reinforcement and viscosity management to achieve high-application rates – even underwater. Provides permanent protection under the most adverse conditions, the formula is uniquely field-friendly and uses advanced, low-toxicity ingredients in a high-build brushable/rollable product. The sister product, Syntho-Subsea™ Epoxy, is available if a higher viscosity, light paste consistency is required. Syntho-Subsea LV Epoxy can be shipped nonregulated by USDOT, IATA, and IMO.

Kit #	Pre-weighted	Volume
SUBLV	5 lb. kit	1 Quart
SUBLVG	20 lb. kit	1 Gallon

Typical Applications

- Anticorrosive Coating: Splash zone, excellent abrasion resistance above or below water.
- Repair Compound: Patching, coating repair, etc.
- Field Joint Compound: Rapid curing, surface tolerant, and excellent cathodic disbondment properties.
- Encapsulating Coating: Smooth, dense, easily decontaminated coating for steel and concrete.
- Wastewater: Reinforces, smoothes, and protects concrete exposed to chemical or municipal waste.
- Application Method: Brush, roller, heated plural airless spray, trowel

Physical Properties of the Cured Coating

Compressive Strength: 7,380 PSI (51 MPa)
 Tensile Strength: 6,000 PSI (41 MPa)
 Flexural Strength: 4,550 PSI (31 MPa)
 Abrasion Resistance: 34.0 mg/1,000 cycles (CS17 wheels with 1,000 gram weights)

Physical Properties

Vehicle Type: Epoxy/Aliphatic amines
 Pigmentation: Color/Inert/
 Fibrous reinforcement
 Colors: Aqua/White
 Finish: Slight texture
 Thinner: Not normally required
 Cleaner: MEK or lacquer thinner
 Mixing Ratio: 1.0/1.0 v/v
 Induction Time: Not required
 Pot Life: Approx. 20 mins. at 77°F (25°C)
 Flash Point: Over 200°F (93°C)
 Solids by Volume: 100%
 Spreading Rate/Gallon: 1,604 mil/sq. ft./gal.
 53.5 sq. ft./gal. at 30 mils
 Dry Time (Dust free): 4 hours at 77°F (25°C)
 Dry Time (Service): 3 hrs. light, 24 hrs.
 heavy service at 77°F (25°C)
 Storage Conditions: Normal, Freezing OK
 VOC: Essentially zero
 Flexural Modulus: 142,188 PSI (980 MPa)
 Minimum/Maximum Usage Temperature:
 Dry Application: -50°F/275°F
 (-45°C/135°C)
 Wet Application: -50°F/160°F
 (-45°C/71°C)

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