

XCorr® 100 Composite Repair Kit

by InduMar Systems, LP

XCorr composites employ a filled, novolac epoxy resin paired with a non-crimp, high-strength quadraxial fiberglass weave to provide superior mechanical reinforcement and chemical resistance with operating temperatures up to 350°F (177°C).

When pipe strength has been compromised due to corrosion or mechanical damage, XCorr 100 Composite Repair Kits provide a path to return to service without costly pipe replacement. The field-mixed novolac epoxy resin and advanced-weave fiberglass combine to provide high-strength reinforcing composite layers, demonstrated to build back wall thickness and corresponding strength.

XCorr 100 Attributes

- Novolac epoxy resin yields exceptional chemical resistance
- Proven performance for hydrocarbon immersion
- 100% solids, No VOCs
- 3:1 mixing ratio (pre-measured)
- Cartridge dispensing minimizes waste, ensures complete mixing, and maximizes pot life
- Quadraxial fiberglass weave provides multidirectional mechanical reinforcement
- Outstanding tensile, compressive, and adhesive bond strength
- Excellent thermal compatibility with steel and concrete

XCorr 100 Specifications

Packaging: Resin supplied in dual cartridge (parts A and B packaged separately) with pre-measured volumes sized specifically for full coverage of supplied reinforcement fabric. Kits provided with static mixers, spreaders and gloves. Two-part dispensing guns sold separately.

Sizes: Reinforcement tape supplied in 12.5" widths and premeasured lengths. The required resin volumes are supplied in ready to use 400 mL or 1.0 L dual cartridge assemblies.

Shelf Life: Part A: 12 months at 75°F (24°C). Part B: 12 months at 75°F (24°C)

Storage Temperature: 32 to 100°F (0 to 43°C), 0-100% relative humidity

Application Temperature: 50 to 150°F (10 to 65°C)

Surface Preparation: Surfaces must be cleaned of all oil and debris and dried. For metal surface, a bright metal finish is desired [SSPC-SP10 (immersion) or SSPC-SP6 (nonimmersion)]. If possible, the pipe should be at ambient temperature before application.



XCorr 100 Properties

Resin at 75°F (24°C)*

Pot Life: 35 minutes

Dry To Touch: 4 hours

Full Mechanical Strength: 24 hours

Full Chemical Resistance: 24 hours

*Pot life is greatly reduced with increased mixing volume and temperature. Cure time is significantly extended at lower temperature.

Composite

Layer Thickness (per ply): 0.06 in

Tensile Strength: 22,800 psi (ASTM D 3039)

Tensile Modulus: 2.27x10⁶ psi (ASTM D 3039)

Lap Shear Adhesion: 1,320 psi (ASTM D 3165)

Compressive Strength: 27,000 psi (ASTM D 685)

Flexural Yield Strength: 3,900 psi (ASTM 790)

Shore D Hardness: 84 (ASTM 2240 Shore D)

Coefficient of Thermal Expansion: 16.2x10⁻⁶ mm/mm/°C (ASTM E 831)

Temperature/Heat Resistance: From -20°F up to 350°F (-29°C to 177°C) –continuous, dry. Consult chemical compatibility to gauge wet service performance.

