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## NPR-5305 Super High Viscosity Hand-Applied Structural Epoxy System

NPR-5305 is a rapid curing, high strength, high corrosion resistant modified epoxy resin designed to repair manholes, sumps, wet wells, pipelines, tanks, and more. Excellent cure at low temperatures and in the presence of water. Typically develops a hard surface in 1-2 hours. Rapid development of physical properties. Film thickness of 100 – 500 mils in a single pass by trowel or brush.

Third party testing and extensive field experience demonstrates excellent chemical resistance to 30% sulfuric acid, 5% nitric acid, 5% sodium hydroxide, hydrogen sulfide, caustics, gasoline, and other hydrocarbons.

## **Typical Physical Properties**

Mix Ratio (Resin/Hardener)	1.5 to 1 by Volume
Mix Ratio (Resin/Hardener)	1 to 1 by Weight
Initial Cure Time, 100 Grams @ 77°F (25°C)	30 minutes
Specific Gravity (resin)	1.06 – 1.09 G/ml
Weight Per Gallon (resin)	8.9 – 9.1 Lbs
Specific Gravity (hardener)	1.64 – 1.71 G/ml
Weight Per Gallon (hardener)	13.7 – 14.3 Lbs
Weight Per Gallon (mixture)	11.3 – 11.7 Lbs
Flexural Modulus (ASTM D-790)	550,000 psi
Flexural Strength (ASTM D-790)	11,500 psi
Tensile Elongation (ASTM D-638)	5%
Tensile Strength (ASTM D-638)	7,000 psi
Tensile Modulus (ASTM D-638)	290,000 psi
Compressive Strength (ASTM C-579)	>18,000 psi
Coefficient of Linear Thermal Expansion	37 x 10-6 cm/cm/OC
Maximum Service Temp. (ambient cure)	150°F (66°C)
Maximum Service Temp. (postcured)	168°F (76°C)
Shore D Hardness (ASTM D-2240-15e1)	>86
Shrinkage	<0.5%
Adhesion: Concrete (ASTM D-4541-95el)	Concrete Fails
Adhesion: Steel (ASTM D-4541-95el)	2000 psi
Abrasion Resistance (D4060-95, CS17)	50mg/1000 @1000 gram load

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