

# EpoxySystems' Product #305 & #306 Epoxy Injection Resins

EpoxySystems' Products #305 and Product #306 are two-component, low viscosity, 100% solids epoxy resin base adhesive. Modified Bisphenol A-Epichlorohydrin epoxy resin and Amido-amine type hardener, modified to be compatible with damp concrete. Product #305 has a Potlife of 1 hour at  $77^{\circ}F$  (25°C) Product #306 is a fast version of Product #305. Product #306 has a pot life of 5-10 minutes at  $77^{\circ}F$  (25°C)

PRODUCT #305 AND PRODUCT #306 is used to restore cracked structural or non-structural concrete to acceptable strength standards by the introduction of an epoxy resin compound, through injection under pressure by either hand operated guns or powered mixing-pump equipment. PRODUCT #305 AND PRODUCT #306 have the ability to penetrate into hairline cracks, due to its low viscosity.

Color: Clear

**Sizes:** Packaged in 1 1/2 gallon kits and 15 gallon kits.

Standards: CALTRANS 8040-01F-02

#### **INSTALLATION**

All cracks must be adequately covered on the surface with EpoxySystems' epoxy paste, and pressure injection ports imbedded in the paste in the holes drilled directly over the center of the crack at distances dictated by the thickness of the concrete structure, severity of cracks and other job factors.

The injection adhesive is introduced at the first valve under sufficient pressure for the epoxy compound to advance to the adjacent valve. The first valve is then capped and the introduction of the epoxy is shifted to the valve at which the epoxy compound appears. The procedure is repeated until the entire crack has been sealed. After a 24 hour cure, the valves and epoxy paste are removed by grinding them flush with the surface.

Product #305 is recommended for sealing cracks in large structures, where the epoxy must flow for a long period of time before the crack is penetrated and filled. Product #306 is most suitable for relatively thin structures, or where there is danger of the epoxy compound flowing out of the cracks before it hardens.

For more information about epoxy injection please contact Epoxy Systems' Technical support department, and/or visit <u>www.epoxy.com/injection.htm</u>.

### PRODUCT WARRANTY

All products proven to be defective in manufacturing will be replaced at no charge. Since the use of these products is beyond our control we cannot assume any risk or liability for results obtained, nor can we accept damages in excess of the purchase price of these products.

#### MAINTENANCE

If additional cracks develop in the structure it is unlikely to be caused by the failure of the epoxy resin due to its great adhesive strength, but rather newly developed cracks in the concrete. New cracks are treated the same way as described above.

#### **TECHNICAL DATA FOR PRODUCT #305 AND PRODUCT #306**

PROPERTY	TEST METHOD	RESULTS
Viscosity		Brookfield Viscometer 200 CPS
Tensile Elongation	ASTM D-638	2%
Tensile Strength	ASTM D-638	9,100 PSI
Compressive Strength	ASTM D-695	13,000 PSI
Flexural Strength	ASTM D-790	9,860 PSI
Slant Shear Strength	ASTM D-732	4,800 PSI
Bond Srength		Concrete Failure
Mixing Ratio (A/B) by volume		2:1
Cure Time at 77°F (25°C)		24 hours
Pot Life at 77°F (25°C)		30 minutes
Color		Amber Yellowish
Consistency		Liquid
Shelf Life at 77°F (25°C), in unopened containers		1 year
Heat Deflection Temperature	ASTM D-648	130°F (54°C)
Weight Per Gallon A-Component B-Component		9.2 ± 0.1 8.1 ± 0.1

For more information please contact:

## **Epoxy Systems, Inc.**

Dunnellon, Florida (802)899-2844 (voice) (352)489-1666 (Voice) (352)465-3497 (fax) info@epoxy.com (Internet) www.epoxy.com (WWW)