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Description

Custom liquid epoxy resins from epoxa us™ are liquid reaction products of epichlorohydrin, bisphenol A and other chemicals.

Introduction

Epoxa us™ CLES epoxy resin systems are widely used in industries of any size where standard commercial formulations are not the best solution for a specific application.

A wide variety of curing agents is available to cure liquid epoxy resins at ambient conditions. The most frequently used are aliphatic polyamines, polyamides, amidoamines, cycloaliphatic amines and modified versions of these curing agents. Curing may also be done at an elevated temperature to improve selected properties such as chemical resistance and glass transition temperature. If anhydride or catalytic curing agents are employed, elevated temperature cures are necessary and long post-cures are required to develop full end properties.

Typical Applications

Epoxa us handles an extensive line of custom liquid epoxy resins and these are utilized in:

- * Bonding Agents
- * Molding, Casting and Tooling
- * Civil Engineering
- * Composites Projects
- * Structural and Marine Coatings
- * Can and Coil Coatings
- * Protective Coatings
- * Photocure Industrial Coatings
- * Potting and Encapsulation

Typical Properties

Property ⁽¹⁾	Value	Method
Epoxide Equivalent Weight (g/eq)	135 - 290	ASTM D-1652
Epoxide Percentage (%)	20.4 – 25.6	ASTM D-1652
Epoxide Group Content (mmol/kg)	5200 – 5500	ASTM D-1652
Color (Platinum Cobalt)	75 Max.	ASTM D-1209
Viscosity @ 25 °C (mPa•s)	2500-40000	ASTM D-445
Hydrolyzable Chloride Content (ppm)	509 Max.	ASTM D-1726
Water Content (ppm)	690 Max.	ASTM E-203
Density @ 25°C (g/ml)	1.10 - 1.29	ASTM D-4052
Epichlorohydrin Content (ppm)	5 Max.	DowM 101321
Shelf Life (Months)	48	

(1) Typical properties, not to be construed as specifications.