Product data sheet

Razeen® LR 1100

Unmodified liquid Epoxy Resins

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General

Razeen® LR 1100 is a general purpose unmodified epoxy resin based on Bisphenol A with medium viscosity.

Applications

Razeen® LR 1100 is widely used in 2-pack amine, polyaminoamide and heat (acid) cured formulation. The main application are in highly chemical resistant coatings, civil engineering, matrix adhesives, composites as well as in the fields of electrical insulation and filament winding for manufacturing large diameter pipes.

Properties

- Medium viscosity and high reactivity
- Compatible with various hardeners, reactive diluents and accelerators
- Low hydrolysable chlorine content and therefore slight tendancy to crystalise at low temperature.
- Conforms to FDA listing (food additives)

The resins formulated yield:

- Superior mechanical and electrical properties
- Excellent chemical and water resistance

Specific Key Data

Property	*Value*	*Test method*
Appearance	Clear, no contamination	JCTM 001
Color APHA	100 max.	ASTM D-1209
Epoxy value	5.20 - 5.49 eq/Kg	ASTM D-1652
Weight per epoxide	182 - 192 g/eq	ASTM D-1652
Viscosity at 25°C (77°F)	11,000 - 14,000 mPa.S	ISO 12058-1
Hydrolysable Chlorine	<500 ppm	JCTM 195
Water Content (KF)	0.08% max.	ASTM D-4017

Specific key data are individually checked throughout, guaranteed and included in certificate of analysis.

Typical Key Data

Residual Epichlorohydrin	5.0 ppm max	JCTM GC6010
Density at 25°C	1.16 g/cm^3	ISO 1675
Flash point	≥ 200°C	ISO 2719

Typical key data are spot checked; the values are typical for the product and are indicated for information only. The values are not included in certificate of analysis.

As-supplied form	Liquid
Odor	None
Shelf life (at storage temperature between 10-50^{0}C) *(See expiry date on original container)*	6 years
Hazardous decomposition products *(When disposed of in fire)*	Carbon monoxide, carbon dioxide and other toxic gases and vapors.
Disposal	Regular procedures approved by local authorities.

Packaging and Storage	Razeen® LR 1100 is supplied in bulk and in 240 kg. steel drums. This product has a minimum shelf life of six years when stored in unopened sealed containers in a dry location at room temperature. Like most liquid epoxy resins, Razeen® LR 1100 may crystallise when stored below room temperature. Heating the resin to 60-70°C (140-160°F), for several hours will re-liquefy it and restore its original properties.
Tariff Number	**39073000**
Handling/Safety Precautions	**Warning: Causes irritation.** **May cause allergic skin reaction.** Avoid contact with eyes, skin or clothing. Avoid breathing vapor, mist or spray. Use with adequate ventilation. Promptly remove wet, contaminated clothing and wash before reuse. Wash after handling. Store in a cool, dry area in closed containers. ***Please read Material Safety Data Sheet before using.***
Note	Razeen® is a registered trademark of JANA or an affiliate thereof.

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