Technical Data Sheet

EPIKOTE™ Resin 828

Product Description

EPIKOTE Resin 828 is a medium viscosity liquid epoxy resin produced from bisphenol A resin and epichlorohydrin. It contains no diluent. EPIKOTE 828 provides good pigment wetting and good resistance to filler settling and a high level of mechanical and chemical resistance properties in cured state. However, as an unmodified pure bisphenol A resin, EPIKOTE 828 is prone to crystallise on storage, particularly in cold conditions (see bulletin EK 1.5.11 for a description of the laboratory test method used to determine the crystallisation tendency of EPIKOTE resins). Note, EPIKOTE 827, 828 and 828 LVEL are unmodified resins of similar type and performance; they offer the formulator a choice of viscosity.

Application Areas/Suggested Uses

Electrical and electronic industries (potting, casting, impregnating). Building and civil engineering industries (floorings, adhesives, mortars, grouts). Filament winding for composites. Solvent free and high-solids coatings.

Benefits

- Medium viscosity
- Good pigment wetting
- Good resistance to pigment settling
- Imparts high mechanical performance
- Imparts good chemical resistance

Sales Specifications

Property	Value	Unit	Test Method
Colour	100 max	Pt-Co	ASTM D445
Epoxy Group Content	5260 - 5420	mmol/kg	SMS 2026
Viscosity at 25°C [1]	12 - 14	Pa.s*	ASTM D445

* 1 Pa.s = 10 Poise

Typical Properties

Property	Value	Unit	Test Method
Density	1.16	kg/L	ASTM D4052
Epoxy Molar Mass	184 - 190	g/equivalent*	SMS 2026
Flash Point (PMCC)	>150	°C	ASTM D93
Viscosity 20°C	32	cP	
Viscosity 30°C	6.0	cP	
Viscosity 40°C	1.5	cP	
Viscosity 50°C	0.55	cP	
Viscosity 60°C	0.24	cP	
Viscosity 70°C	0.12	cP	

*number of grams of resin containing 1 equivalent of epoxide (Weight per equivalent, WPE, is an alternative term).

EPIKOTE Resin 828 Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

EPIKOTE Resin 828 should be stored at room temperature in conditions such that moisture is excluded, in the original containers kept tightly closed. Under these conditions the shelf life should be a minimum of three years from date of certification.

If EPIKOTE 828 develops haziness or crystallises on storage, this can be dispersed and the resin restored to its original condition by warming to 55 – 65°C, with stirring.