

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 LEVEL 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 | ASTMD1209 |
| Epoxy Group Content | 5260 - 5420 | mmol/kg | SMS 2026 |
| Viscosity at 25°C | 12 - 14 | Pa.s* | ASTMD445 |

* 1 Pa.s = 10 Poise

Typical Properties

| Property | Value | Unit | Test Method |
|--------------------|-----------|---------------|-------------|
| Density | 1.16 | kg/L | ASTMD4052 |
| Epoxy Molar Mass | 184 - 190 | g/equivalent* | SMS 2026 |
| Flash Point (PMCC) | >150 | °C | ASTMD93 |
| Viscosity 20°C | 32 | Pa.s | |
| Viscosity 30°C | 6.0 | Pa.s | |
| Viscosity 40°C | 1.5 | Pa.s | |
| Viscosity 50°C | 0.55 | Pa.s | |
| Viscosity 60°C | 0.24 | Pa.s | |
| Viscosity 70°C | 0.12 | Pa.s | |

*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.

EPIKOTE Resin 828

<https://www.hexion.com/en-US/product/epikote-resin-828>

Generated: April 12, 2022

Issue Date:

Revision: 2/1/2007 12:00:00 AM

® and ™ Licensed trademarks of Hexion Inc.

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. **HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION**, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.