

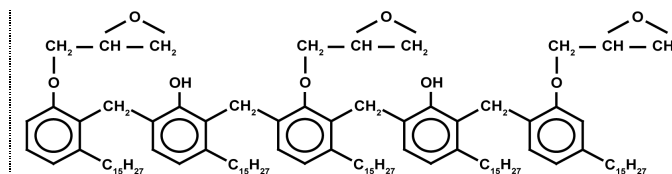
Cardolite[®] NC-547

Epoxy Novolac Resin

Technical Datasheet

DESCRIPTION

Cardolite NC-547 is a polyglycidyl ether of an alkenyl phenol formaldehyde novolac resin. The cured resin containing NC-547 has a lower modulus, a lower glass transition temperature and better flexibility than an unmodified epoxy system. The reactive epoxide groups and the long alkenyl side chains (which imparts flexibility in cured phenolic and epoxy resins) make this epoxy novolac a unique product.



CHEMICAL STRUCTURE

PROPERTIES

PROPERTY	SPECIFICATION	TEST METHOD
Viscosity @ 25°C (cPs)	20,000 - 50,000	ASTM D2196
Epoxy Equivalent Weight (EEW) ¹	550 - 850	ASTM D1652-97
Hydrolyzable chlorine (%)	≤ 2.5	ASTM D1726-11
Volatile Loss (% weight)	≤ 2	ASTM D2369-98

PROPERTY	TYPICAL VALUE	TEST METHOD
Appearance	Reddish brown liquid	Visual
Color (Gardner)	18	ASTM D1544
Density @ 25°C (kg/L) (lbs/gal)	0.935 7.8	ASTM D1475
Flash point	66°C / 150.8°F	ASTM D93
Shelf Life (Months)	6	-

Typical properties are not to be construed as specifications

¹ Based on total product weight

APPLICATIONS

Cardolite NC-547 is suitable for use in adhesives, specialty flexible coatings, electrical potting, encapsulation, and as adhesion promoter for urethanes. Mixtures of NC-547 with some commercial epoxy resins may phase separate within several days (4-5) of the initial mixing. It is recommended that NC-547 be mixed in with other epoxy resins directly at the time of application (or remixed if previously added together) and then hardened with appropriate curing agents before phase separation can occur.

ADVANTAGES

- Adds flexibility while maintaining performance
- Excellent chemical and water resistance
- High reactivity
- Low volatility
- Based from natural, renewable, non-food raw material feedstock

REGULATORY STATUS

Please refer to the material safety data sheet (MSDS). Specific information regarding chemical inventory listing can be obtained from your local sales representative.

SAFETY PRECAUTIONS

Please refer to the material safety data sheet (MSDS). Copies of the MSDS can be requested on the Cardolite website or via your local sales representative.

STABILITY AND STORAGE

Cardolite products may absorb moisture and carbon dioxide when left in open containers, which could result in increased viscosity, discoloration, reduction of reactivity, and/or crystallization of the products. These products should be kept tightly sealed in their original containers when not in use, and stored in a cool, dry place.

CONTACT INFORMATION



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