

Cardolite[®] NX-5594

Epoxy Curing Agent

Technical Datasheet

DESCRIPTION

Cardolite NX-5594 is a modified tert-butyl phenol-free, and low viscosity phenalkamine curing agent, suitable for formulating high solids and solvent-free epoxy systems for heavy-duty and pipe coatings, flooring applications, adhesives and mortars. This product cures very fast even at lower temperatures and provides excellent cathodic disbondment performance. NX-5594 can also be used as an accelerator or co-curing for both amine and polyamide based hardeners.

PROPERTIES

PROPERTY	SPECIFICATION	TEST METHOD
Color (Gardner)	≤ 17	ASTM D1544
Viscosity @ 25°C (cPs)	750 - 1,400	ASTM D2196
Amine Value (mg KOH/g)	385 - 420	ASTM D2074
Volatile Loss (% weight)	≤ 2.0	ASTM D2369-98

PROPERTY	TYPICAL VALUE	TEST METHOD
Appearance	Orange brown liquid	Visual
Theoretical Active Hydrogen Equivalent (AHEW) ¹	76	Calculated
Density @ 25°C (kg/L) (lbs/gal)	1.03 8.56	ASTM D1475
Flash point	> 104°C / > 219°F	ASTM D93
Recommended Use Level (phr, EEW 190)	40	-
Shelf Life (Months)	12	-

Typical properties are not to be construed as specifications

¹Based on total product weight

CURE PROPERTIES

	FORMULATION	TEST METHOD
Liquid Epoxy Resin (pbw, EEW 190)	50	
Cardolite NX-5594 (pbw)	20	
Mix viscosity @ 25°C (cPs)	7,312	
Gel time, 50 g @ 25°C (min)	13 - 18	NTM-15
Thin film dry times, 8 mils (200 micron)		
@ 25°C (77°F) (hrs hard/through)	2.5 / 3.5	ASTM D5895
@ 5°C (41°F) (hrs hard/through)	8 / 11	ASTM D5895
@ 0°C (32°F) (hrs hard/through)	11 / 14	ASTM D5895
Film appearance @ 10°C, 92% RH	Hazy	Visual

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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