Cardolite® LITE 3060 Epoxy Curing Agent Preliminary Technical Datasheet

DESCRIPTION

Cardolite LITE 3060 is a solvent and benzyl alcohol free, light color, very low viscosity phenalkamide curing agent suitable for solvent free and very high solid epoxy coatings. The phenalkamide curing agent technology is chemically designed to give coatings a combination of the benefits of both polyamide and phenalkamine systems. This curing agent offers advanced performance such as fast and low temperature cure, good dry color stability, and extended overcoat window in addition to excellent water resistance, adhesion, flexibility, and appearance at high humidity.

PROPERTIES

Property	PROVISIONAL SPECIFICATION	Test Method
Color (Gardner)	≤ 10	ASTM D1544
Viscosity @ 25°C (cPs)	500 - 1,000	ASTM D2196
Amine Value (mg KOH/g)	440 - 480	ASTM D2074

PROPERTY	TYPICAL VALUE	Test Method
Appearance	Yellow liquid	Visual
Theoretical Active Hydrogen Equivalent (AHEW) ¹	104	Calculated
Density @ 25°C (kg/L) (lbs/gal)	0.96 8.01	ASTM D1475
Recommended Use Level (phr, EEW 190)	55	
Shelf Life (Months)	12	

Typical properties are not to be construed as specifications

APPLICATIONS

Cardolite LITE 3060 is suitable for fast curing solvent free and very high solids general purpose marine, industrial, floor, and protective coatings. This product's quick hardness development and long pot life make it ideal for applications requiring fast return to service or multiple coats over a short period of time. It can be used for coating applications under cold and humid conditions, and provides excellent corrosion protection. Excellent flexibility, adhesion on various metal/primed substrates, and early water resistance make this curing agent especially suitable for marine, transportation, and general industrial equipment coatings. Its very low viscosity enables lower emission coatings and improves system workability. Applications requiring the speed and corrosion protection of a phenalkamine that need better dry color stability, flexibility and extended recoat interval can benefit from this curing agent.

ADVANTAGES

- No solvent or benzyl alcohol
- Very low viscosity for excellent workability and low V.O.C.
- Excellent combination of rapid cure and long pot life at both ambient and low (5°C/40°F) temperatures
- Light dry and wet color for broad color range use
- Fast hardness development
- Excellent overcoatability

- Excellent flexibility and impact resistance
- Excellent chemical resistance
- Compatible with most epoxy resins, solvents and their blends
- Excellent corrosion resistance and early water resistance
- Non-critical mix ratio
- Non-toxic
- Based from natural, renewable, non-food chain raw material feedstock

¹ Based on total product weight

	FORMULATION A*	Test Method
Liquid Epoxy Resin (pbw, EEW 190)	100	
Cardolite LITE 3060 (pbw)	55	
Mix viscosity @ 25°C (cPs)	5,655	
Gel time, 50 g @ 25°C (min)	48	NTM-15
Thin film dry times, WFT 8 mils (200 micron)		
@ 25°C (77°F) (hrs hard/through)	5.0/9.0	ASTM D5895
@ 5°C (41°F) (hrs hard/through)	17.5/24.0	ASTM D5895
Film appearance @ 10°C, 92% RH	Slightly Hazy	Visual

^{*20} to 30 min induction time recommended

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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