

VERSAMID[®] C-30 Polyamide Curing Agent

Product Description

VERSAMID® C-30 is a low viscosity, light colored, modified cycloaliphatic amine curing agent that is moisture insensitive at room temperature. It has been designed specifically for use in high solids coatings, self-leveling flooring and castings where excellent chemical resistance, good color retention and excellent flow and blush resistance are required.

Applications

- Industrial maintenance surface coating applications
- Primers
- Encapsulating potting and laminating applications
- Low viscosity, thermoset adhesive formulations

Features

- Excellent chemical resistance
- Excellent flow and blush resistance
- Good color retention

Key Specified Properties

| Property | Value |
|-------------------------------------|-----------------------|
| Appearance | Clear, no haze liquid |
| Color, Gardner, max | 2 |
| Viscosity (Brookfield) at 75 °C, cP | 250 - 500 |
| Amine value, mg KOH/g | 245 - 285 |

Typical Properties

| Property | Value |
|--------------------|---------------|
| AHEW | 114 |
| Density, lb/gal | 8.6 |
| Flash point (Seta) | >200°F |
| Benzyl Alcohol | 44% by weight |

Processing

Mix ratio with 190 EEW liquid epoxy is 60 phr with a gel time of 38. Due to chemical reaction, VERSAMID® C-30 and epoxy resins should not be mixed until just prior to use.

| Typical Chemical Resistance Properties | | |
|--|---------------|--|
| Chemical | % weight gain | |
| 10% Acetic acid | 2.10% | |
| 10% Hydrochloric acid | 0.55% | |
| 10% Sulfuric acid | 0.96% | |
| 10% Sodium Hydroxide | 0.45% | |
| Methyl ethyl ketone | Destroyed | |
| Xylene | 0.13% | |
| Ethanol | 4.47% | |

Typical Chemical Resistance Properties

Percent weight gain after 7 day cure at 25°C followed by 21 day immersion at 25°C.

Typical Properties of a VERSAMID® C-30 Cured Coating

| Property | Value |
|---------------------------|--------|
| Gel Time, minutes | 38 |
| Tack Free Time, hours | 5 |
| Through-cure time, hours | 7 |
| Pot Life, hours | 2.5 |
| Tensile Strength, psi | 6,900 |
| Elongation, % | 5.9 |
| Flexural Modulus, kpsi | 450 |
| Compressive Strength, psi | 12,100 |
| Tg, °C max | 87 |

Cured with 190 EEW liquid epoxy resin for 7 days at 25C

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Starting Point Formulations

The following starting point formulation is recommended for an initial evaluation of VERSAMID® C-30. Additional optimization of the formulation may be required to achieve maximum suitability for specific applications.

White Topcoat

| Part A | Parts by weight |
|-------------------------------|-----------------|
| Liquid Epoxy Resin EEW190 | 37.7 |
| Titanium Dioxide | 15.0 |
| Talc | 5.0 |
| Dioxosilane | 2.1 |
| Barytes (bleached) | 25.8 |
| Tricresyl phosphate | 3.0 |
| Xylene | 3.4 |
| Propylene glycol methyl ether | 8.0 |
| | |
| Part B | |
| VERSAMID® C-30 | 23.0 |
| Total | 123.0 |

Formulation Attributes

| Non-volatiles (theoretical), % | 90.7 |
|----------------------------------|-------|
| Pot Life at 25°C, hours | 1-2 |
| Pigment:Binder ratio | 0.8:1 |
| Tack-free time at 25°C, hours | 5-6 |
| Through-cure time at 25°C, hours | 24-30 |

Storage

VERSAMID[®] **C-30** should be stored in a dry place, in its sealed original container, at temperatures between **2°C to 40°C (35.6°F to 104°F)**. Under these storage conditions the shelf life is **24 months** from date of manufacture. The product should not be exposed to direct sunlight.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up–to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees

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and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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