

Epoxy Curing Agents and Modifiers

Ancamine® 1482 Curing Agent

Description

Ancamine 1482 curing agent is a liquid eutectic mixture of aromatic amines designed to cure liquid epoxy resins. Relative to conventional solid aromatic amines, this product offers the advantage of extending pot life by permitting the mixing of the resin and curing agent at room temperature. As a result, waste due to premature gelation can be reduced or even eliminated. As an elevated temperature curing agent for liquid epoxy resins, Ancamine 1482 curing agent is similar in performance to standard solid aromatic amines such as methylene dianiline (MDA) and metaphenylene diamine (mPDA). It provides excellent chemical resistance, typical of aromatic amines.

Ancamine 1482 curing agent is FDA approved as an epoxy hardener under 21 CFR 177.2280 for the manufacture of repeat use articles such as filament-wound pipes and tanks.

Where appearance is important, systems based on this product should be formulated in dark or "shade" colors only.

Advantages

- Long pot life
- Can be mixed at room temperature
- Provides excellent chemical and heat resistance

Applications

- Pre-impregnated laminates
- Chemically resistant pipes and containers by filament winding

- Potting
- Castings and laminates that require good electrical properties with high heat and chemical resistance.

Typical Properties

Appearance	Dark, brown liquid
Color (Gardner)	18
Viscosity @ 77 °F	9
Amine Value, mg KOH/g	775
Specific Gravity @ 77 °F	1.15
Density (lb/gal) @ 77 °F	9.5
Flash Point (closed cup) (°C)	90
Equivalent Wt/(H)	42
Recommended Use Level (phr, EEW=190)	25

Typical Handling Properties

Gel Time (150 g mix @ 77 °F) (hr)	16
Thin Film Set Time, hr @ 77 °F (B-Stage only)	24-36

Typical Performance (Cure Schedule 2)

Heat Deflection Temp, °F (ASTM D648-264 psi)	320
Barcol Hardness (Model GYZJ-935)	90
Flexural Strength, psi	19,000
Flexural Modulus, psi	398,000
Tensile Strength, psi	9,366
Tensile Modulus, psi	456,000
Elongation (%)	4.2

Storage Life

At least 24 months from the date of manufacture in the original sealed container at ambient temperature. Store away from excessive heat and humidity in tightly closed containers.

Safety and Handling Information

Refer to the Material Safety Data Sheet for Ancamine 1482 curing agent for more information.

Typical Cure Schedule

- 1) 1 hr @ 212 °F plus 4 hr @ 302 °F
- 2) 1 hr @ 212 °F plus 1 hr @ 392 °F

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