

Epoxy Curing Agents and Modifiers

Ancamine® 1922A Curing Agent

Description

Ancamine 1922A curing agent is a low viscosity, moderately reactive room temperature curing agent for epoxy resins.

Advantages

- Imparts excellent thermal shock resistance
- Provides toughness and resiliency in standard liquid epoxy resin formulations
- Provides good electrical properties up to 140 °F (60 °C)
- Very low vapor pressure

Applications

- Electrical potting and encapsulation
- Ambient and heat-cured structural adhesives for aerospace, automotive, electrical and other high-performance applications
- Composite binders

Storage Life

At least 12 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.

Handling Precautions

Refer to the Material Safety Data Sheet for Ancamine 1922A curing agent.

Typical Cure Schedule

- 1) 2-7 days at ambient temperature.
- 2) Gel at ambient temperature plus 2 hours at 212 °F (100 °C).

Typical Properties

Appearance	Colorless Liquid
Color ⁽¹⁾ (Gardner)	1
Viscosity ⁽²⁾ @ 77 °F (25 °C) (cP)	10
Amine Value ⁽³⁾ (mg KOH/g)	507
Specific Gravity ⁽⁴⁾ @ 77 °F (25 °C)	1.00
Density @ 77 °F (25 °C) (lb/gal)	8.4
Flash Point ⁽⁵⁾ (°F)	335
Equivalent Wt/{H}	55
Recommended Use Level (phr, EEW=190)	29

TYPICAL HANDLING PROPERTIES

Gel Time ⁽⁶⁾ [150g mix @ 77 °F (25 °C)] (min)	57
Peak Exotherm ⁽⁷⁾ (100g mass) (°F)	306
Peak Exotherm Time (min)	85

TYPICAL PERFORMANCE

7-day cure @ ambient temperature	
Glass Transition Temp (ASTM D3418-82) (°F)	117
Flexural Strength ⁽⁸⁾ (psi)	13,200
Flexural Modulus ⁽⁸⁾ (psi)	400,000

Footnotes:

- (1) ASTM D1544-80
- (2) ASTM D455-83
- (3) Perchloric Acid Titration
- (4) ASTM D147-85
- (5) Seta Flash Closed Cup
- (6) Techne GT-4 Gelation Timer
- (7) ASTM D2471-71
- (8) ASTM D790-86