

Product information

ANCAMINE[®] 2900

Curing Agent

DESCRIPTION

Ancamine 2900 curing agent is an aromatic amine designed for curing liquid epoxy resins at elevated temperatures. Ancamine 2900 curing agent exhibits moderate pot life with excellent chemical resistance, high mechanical strength, and high temperature tolerance.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Dark Brown		
Colour	>16	Gardner	
Viscosity @ 77°F / 25°C	80–100	cPs	
Specific Gravity @ 77°F / 25°C	0.99		
Equivalent Wt{(H)}	38		
Recommended Use Level	21	phr	EEW=190

ADVANTAGES

- Excellent physical properties
- High heat deflection temperature
- Good pot life
- Good chemical resistance

RECOMMENDED PROCESSING

- Filament Winding
- Resin Transfer Molding
- Fiber Impregnation in a Controlled Environment

APPLICATIONS

- Laminates and Composites
- Filament Wound Pipe / Liners / Fittings

SHELF LIFE

At least 36 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.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Ancamine 2900 curing agent.

TYPICAL CURE SCHEDULE

2 hours at 176°F, then 3 hours at 302°F
2 hours at 80°C, then 3 hours at 150°C

TYPICAL HANDLING PROPERTIES *

Property	Value	Unit	Method
Mixed Viscosity @ 104°F/ 40°C	600–700	cPs	
Gel Time (150g mix @ 77°F/ 25°C)	170–200	min	
Time to 10,000 cPs @ 104°F/ 40°C	110	min	

THERMAL PERFORMANCE *

Property			
Glass Transition Temperature	155°C	310°F	
(DSC second scan)			

MECHANICAL PERFORMANCE - CAST PANEL *

Property			
Tensile Strength	73.1 MPa	10.6 ksi	
Tensile Modulus	2.1 GPa	0.30 Msi	
Tensile Elongation at Break	5.4%	5.4%	
Flexural Strength	147.5 MPa	21.4 ksi	
Flexural Modulus	2.7 GPa	0.39 Msi	
Compressive Strength	112.4 MPa	16.3 ksi	
Compressive Modulus	2.0 GPa	0.29 Msi	

MECHANICAL PERFORMANCE - COMPOSITE PANEL *

Property			
ILSS 0° Longitude / 90°	71 MPa	10 ksi	
Flexural Strength - Composite 0° Longitude	985 MPa	143 ksi	
Flexural Modulus - Composite 0° Longitude	46 GPa	6.65 Msi	
Compressive Strength (tabs) - 0° Longitude	372 MPa	54 ksi	
Compressive Modulus (w/o tabs) - 0° Longitude	13.4 GPa	1.9 Msi	

Composite Panel Fabrication:

Method: Vacuum Assisted Resin Transfer Molding

Fiber Type: E-glass (275g / m²) Unidirectional

Fiber Volume: 60 ± 3%

Cure Schedule: 2 hrs @ 80°C + 3 hrs @ 150°C

* Ancamine 2900 curing agent formulated with standard Bisphenol-A based (DGEBA, EEW=180) epoxy resin

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