Product information

ANCAMIDE® 2781

Curing Agent

DESCRIPTION

Ancamide 2781 curing agent is a versatile, low viscosity hardener designed to cure liquid epoxy resins at elevated temperatures. The unique chemistry offers a longer working time than traditional amidoamines. This can enhance the processing of complex weaved fabric by optimum fiber wetting, minimized material waste and improved overall throughput and provide an overall excellent balance of pot life and low temperature cure. It is recommended for use in cure-in-place-pipe, composite processing, electronics and industrial electrical applications.

TYPICAL PROPERTIES

Property	Value
Appearance	Amber Liquid
Color (Gardner)	max. 12
Viscosity[1] @ 25 °C (mPa.s)	80-120
Specific Gravity @ 25°C (g/cm^3)	0,92
Equivalent Wt/[H]	104
Recommended Use Level[2] (PHR)	55

TYPICAL HANDLING PROPERTIES[2]

Property	Value
Mixed Viscosity[1] @ 25 °C (mPa.s)	850
Gel Time[3] 150g mix @ 25 °C (min)	400-500
Time to 10,000 mPa.s.[1] @ 25 °C (min)	425

ADVANTAGES

- Longer working time
- Low exotherm
- Low viscosity

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APPLICATIONS

• Cure-in-Place-Pipe
• Composites – Filament winding, VARTM
• Resin Infusion
• Potting and encapsulation

TYPICAL CURE SCHEDULE

• 2 h @ 65°C
• Post cure at higher temperatures (100°C) can be accomplished depending on processing flexibility and final product performance needs.

SHELF 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.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Ancamide 2781 curing agent.

THERMAL PERFORMANCE[2]

Glass Transition Temperature[4]	**61°C**
Glass Transition Temperature[5]	**53 °C**

MECHANICAL PERFORMANCE - CAST PANEL[2]

Property	Value
Flexural Strength	51 MPa
Flexural Modulus	2.3 GPa
Tensile Strength	51 MPa
Tensile Modulus	1.8 GPa
Tensile Elongation @ Break	6%
Compressive Strength	42 MPa
Compressive Modulus	0.968 GPa

MECHANICAL PERFORMANCE - COMPOSITE PANEL[2]

Property	Value
ILSS 0° Longitude / 90° Transverse (ASTM D2344)	38/15 MPa
Flexural Strength - Composite 0° Longitude (ASTM D790)	897 MPa
Flexural Modulus - Composite 0° Longitude	42.1 GPa

(1) Brookfield RVTD, spindle 27
(2) Bisphenol-A based epoxy resin (EEW=190)
Cure schedule cast and composite panel: 2 h @ 150°F/65°C
Composite panel by vacuum-assisted resin transfer molding
Fiber type: E-glass (275 g/m2) Unidirectional
Fiber volume: 60 ± 3 %
(3) Techne Gelation Timer, 150 g mix
(4) DSC @ 10°C/min second heating scan
(5) DMA @ 3°C/min- Three point bending (Tan Delta)

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