

ANCAMIDE® 506

Curing Agent

DESCRIPTION

Ancamide 506 is an aliphatic amidoamine curing agent designed for use with liquid epoxy resin. In comparison with other members of the Ancamide 500 series of amidoamines, Ancamide 506 has the longest pot life and lowest viscosity. These properties together with a very low exotherm and non-critical loading make it suitable for casting, wet lay-up laminating and various civil engineering applications including concrete repair and flooring.

Ancamide 506 can also be used with cycloaliphatic amines such as Ancamine 1618 or 2143 to formulate high-solids coatings.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Amber Liquid		
Colour	12	Gardner	ASTM D 1544-80
Viscosity @ 25°C	200-500	mPa.s	Brookfield RVTD, Spindle 4
Amine Value	410-440	mg KOH/g	Perchloric Acid Titration
Specific Gravity @ 21°C	0.93		
Equivalent	110	Wt/{H}	
Recommended use Level	50	PHR	With Bisphenol A diglycidyl ether (EEW=190)

ADVANTAGES

- Very long pot life
- Low viscosity

APPLICATIONS

- Composites and wet lay up laminates
- Flooring
- Concrete repair
- High-solids coatings

SHELF LIFE

At least 24 months from the date of manufacture in the original sealed container at ambient temperature. Material may crystallize or solidify upon exposure to low temperatures. Crystallized or solidified material can be utilized after melting at elevated temperatures without impacting handling or physical properties. It is recommended that the material be heated to 50-70°C while mixing continuously for 1 hour. Once the solidified material has fully homogenized, it can be cooled to room temperature and utilized under normal conditions.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Ancamide 506 curing agent.

TYPICAL HANDLING PROPERTIES*

Property	Value	Unit	Method
Mixed Viscosity at 25°C	1,500	mPa.s	Brookfield RVTD, Spindle 4
Gel Time (150g mix at 25°C)	400	mins	Techne GT-3 Gelation Timer
Thin Film Set Time 25°C	23	h	BK Drying Recorder Phase III

TYPICAL CURE SCHEDULE

- (i) 7-14 days at ambient
- (ii) 2 days @ 25°C + 2h @ 100°C

TYPICAL PERFORMANCE PROPERTIES*

Property	Value	Unit	Method
Cure Schedule (ii)			
Tensile Strength	47	MPa	ISO 527
Tensile Modulus	2.0	GPa	ISO 527
Flexural Strength	73	MPa	ISO 178
Flexural Modulus	1.3	GPa	ISO 178
Heat Distortion Temperature	58	°C	ASTM D648
Tensile Elongation at Break	2.0	%	

* With Bisphenol A diglycidyl ether (EEW=190)

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