

ANCAMIDE® 503**Curing Agent****DESCRIPTION**

Ancamide 503 is an aliphatic amidoamine curing agent designed for use with liquid epoxy resin. Special features of this room temperature curing agent are low viscosity, relatively long pot life and non-critical loading. It is ideal for use in concrete coatings, flooring, crack injection, adhesives (especially new to old concrete), and casting applications.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Amber Liquid		
Colour	10	Gardner	ASTM D 1544-80
Viscosity @ 25°C	200-500	mPa.s	Brookfield RVTD, Spindle 4
Amine Value	490-520	mg KOH/g	Perchloric Acid Titration
Specific Gravity @ 21°C	0.95		
Equivalent	95	Wt/{H}	
Recommended use Level	50	PHR	With Bisphenol A diglycidyl ether (EEW=190)

ADVANTAGES

- Excellent adhesion to concrete
- Moisture tolerant
- Non-critical loading

APPLICATIONS

- Concrete coatings
- Flooring
- Crack injection
- Adhesives

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 503 curing agent.

All amidoamine curing agents are susceptible to discolouration as a result of the formation of a loose organometallic complex between the Amidoamine and iron (Fe 3+). Should discolouration take place, it will have no impact upon product performance and will normally dissipate once the curing agent is mixed with epoxy resin and other materials.

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)	70	mins	Techne GT-3 Gelation Timer
Peak Exotherm (150g mix at 25°C)	138	°C	
Time to Peak Exotherm	68	mins	
Thin Film Set Time 25°C	9	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	45	MPa	ISO 527
Tensile Modulus	2.1	GPa	ISO 527
Flexural Strength	61	MPa	ISO 178
Flexural Modulus	1.7	GPa	ISO 178
Heat Distortion Temperature	48	°C	ASTM D648
Tensile Elongation at Break	2.1	%	

* With Bisphenol A diglycidyl ether (EEW=190)

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