

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.

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 PROPERTIES

Appearance	Amber liquid
Colour¹ (Gardner)	10
Viscosity² @ 25°C [mPa.s]	200-500
Amine Value³ [mg KOH/g]	490-520
Specific Gravity @ 21°C	0.95
Equivalent Wt/{H}	95
Recommended use Level⁴, [PHR]	50

TYPICAL HANDLING PROPERTIES⁴

Mixed Viscosity² at 25°C, [mPa.s]	1,500
Gel Time⁵ (150g mix at 25°C), [mins]	70
Peak Exotherm (150g mix at 25°C), [°C]	138
Time to Peak Exotherm [mins]	68
Thin Film Set Time⁶ 25°C, [h]	9
Typical cure schedule	
(i) 7-14 days at ambient	
(ii) 2 days @ 25°C + 2h @ 100°C	

TYPICAL PERFORMANCE PROPERTIES⁴

Cure Schedule (ii)	
Tensile Strength⁷, [MPa]	45
Tensile Modulus⁷, [GPa]	2.1
Flexural Strength⁸, [MPa]	61
Flexural Modulus⁸, [GPa]	1.7
Heat Distortion Temperature⁹, [°C]	48
Tensile Elongation at Break [%]	2.1

Footnotes:

- (1) ASTM D 1544-80
- (2) Brookfield RVTD, Spindle 4
- (3) Perchloric Acid Titration
- (4) With Bisphenol A diglycidyl ether (EEW=190)
- (5) Techne GT-3 Gelation Timer
- (6) BK Drying Recorder Phase III
- (7) ISO 527
- (8) ISO 178
- (9) ASTM D648

Epoxy Curing Agents and Modifiers

ANCAMIDE® 503 Curing Agent

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