

ANCAMINE[®] 1856**Curing Agent****DESCRIPTION**

Ancamine 1856 curing agent is a modified aliphatic amine with high reactivity. Typical of Mannich-Base curing agents, Ancamine 1856 curing agent has the ability to cure well under adverse conditions of high humidity and low temperatures (down to 30°F). Ancamine 1856 is most commonly used as an accelerator for other curing agents.

TYPICAL PROPERTIES

Property	Value	Unit
Appearance	Yellow Liquid	
Colour	5	Gardner
Viscosity @ 77°F	3,000	cP
Amine Value	460	mg KOH/g
Specific Gravity @ 77°F	1.12	
Flash Point (closed cup)	230	°F
Equivalent Wt/{H}	73	
Recommended Use Level	40	phr, EEW=190

BENEFITS

- Fast cure and rapid development of hardness
- High strength and modulus
- Excellent cure at low temperatures
- Reduced tendency to form carbamates with carbon dioxide in the atmosphere during cure
- Very good chemical resistance to distilled water, inorganic acids and alkalis; good against organic acids and alkalis and many organic solvents

APPLICATIONS

- Concrete repair mortars
- Solvent-free and high-solids coatings
- Adhesives
- Tank linings and chemically resistant coatings
- Accelerator for other curing agents

When used in conjunction with a diluent (e.g., Epodil® LV5 diluent, benzyl alcohol), Ancamine 1856 curing agent is suitable for use in civil engineering applications where its low temperature cure characteristics and ability to cure in damp conditions are an advantage.

SHELF LIFE

At least 12 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 on Ancamine 1856 curing agent.

TYPICAL CURE SCHEDULE

2-7 days at ambient temperature.

TYPICAL HANDLING PROPERTIES*

Property	Value	Unit
Gel Time (150g mix @ 77°F)	9	min
Thin Film Set Time		
@ 77°F	1.8	h
@ 40°F	3.5	h
Peak Exotherm (100g mass)	289	°F
Peak Exotherm Time	18	min

*Ancamine 1856 curing agent formulated with standard Bisphenol-A based (DGEBA, EEW=190) epoxy resin.

TYPICAL PERFORMANCE PROPERTIES*

Property	Value	Unit
(Cured 7 days @ 77°F)		
Compressive Strength	15,400	psi
Compressive Modulus	402	thousand psi
Tensile Strength	12,400	psi
Tensile Modulus	606	thousand psi
Elongation	4.4	%
Flexural Strength	20,900	psi
Flexural Modulus	658	thousand psi
Heat Deflection Temperature (ASTM D648-264 psi)	132	°F
Barcol Hardness (Model GYZJ-935)	86	
Bond Strength (mild steel to mild steel)	1,957	psi

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