

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.

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.

TABLE 1: TYPICAL PROPERTIES

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

TABLE 2: TYPICAL HANDLING PROPERTIES*

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

TABLE 3: TYPICAL PERFORMANCE PROPERTIES*

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

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

Epoxy Curing Agents and Modifiers

ANCAMINE[®] 1856 Curing Agent

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