

# Epoxy Curing Agents and Modifiers

## Amicure® PACM Curing Agent

### DESCRIPTION

Amicure PACM curing agent is an unmodified cycloaliphatic amine. Chemically, it is bis-(p-aminocyclohexyl) methane. It has been designed for use as an alternative to aromatic amines in the elevated temperature cure of liquid epoxy resins.

### ADVANTAGES

- Low viscosity
- Long pot lives at moderate temperatures
- Excellent mechanical properties following elevated temperature cure
- When heat-cured, good resistance against acids, alkalies, water and hydrocarbon solvents

### APPLICATIONS

- Filament winding
- Laminates
- Casting and tooling

### STORAGE LIFE

At least 24 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.

### HANDLING PRECAUTIONS

Refer to the Material Safety Data Sheet for Amicure PACM curing agent.

### TYPICAL CURE SCHEDULE

- 2 hours at 176 °F + 2 hours at 302 °F.
- 2 hours at 176 °F + 2 hours @ 302 °F + 2 hours @ 392 °F.

### TYPICAL PROPERTIES

Appearance	Clear Liquid
Color (Gardner)	1
Viscosity @ 77 °F (cP)	80
Specific Gravity @ 77 °F	0.96
Amine Value (mg KOH/g)	526
Flash Point (closed cup) (°F)	>194
Equivalent Wt/{H}	52.5
Recommended Use Level (phr, EEW=190)	28

### TYPICAL HANDLING PROPERTIES\*

Mixed Viscosity @ 77 °F (cP)	3,100
Gel Time (150g mix @ 77 °F) (min)	213

### TYPICAL PERFORMANCE\*\*

Heat Deflection Temperature (ASTM D648-264 psi) (°F)	316
Flexural Strength (psi)	23,500
Flexural Modulus (psi)	510
Tensile Strength (psi)	10,400
Tensile Modulus (thousand psi)	325
Tensile Elongation @ Break (%)	5.5

### CHEMICAL RESISTANCE\*

(120-Day, 77 °F Immersion)	% Wt Change
Acetone	6.35
Toluene	0.66
Ethanol	1.20
Methanol	8.00
10% Ammonium Hydroxide	1.76
10% Sodium Hydroxide	1.49
10% Nitric Acid	3.81
25% Acetic Acid	14.92
30% Sulfuric Acid	1.86
Deionized Water	1.21

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

\*\* Amicure PACM curing agent formulated with standard Bisphenol-A based (DGEBA,EEW=182) epoxy resin.

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