

**ANCAMINE® 2072** Curing Agent**DESCRIPTION**

Ancamine 2072 curing agent is a phenol-free, Mannich-Base cycloaliphatic amine intended for use with liquid epoxy resins. It cures well under cold, damp conditions, and it can be used in conjunction with Ancamide® 506 curing agent to extend pot life.

**ADVANTAGES**

- Provides fast cure at ambient and low temperatures
- Good gloss and smooth finishes in cured films
- Very good chemical resistance
- Ability to cure under high humidity and low temperature conditions [down to 40°F (4°C)]
- Low viscosity
- Phenol-free

**APPLICATIONS**

- Industrial and semi-decorative flooring and coatings
- Concrete repair compounds
- General-purpose concrete primers

**SHELF 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.

**STORAGE AND HANDLING**

Refer to the Safety Data Sheet for Ancamine 2072 curing agent.

**TYPICAL CURE SCHEDULE**

2-7 days at ambient temperature.

**TABLE 1: TYPICAL PROPERTIES**

<b>Appearance</b>	Straw-Colored Liquid
<b>Color (Gardner)</b>	3
<b>Viscosity @ 77°F (25°C) (cP)</b>	200
<b>Amine Value (mg KOH/g)</b>	350
<b>Specific Gravity @ 77°F (25°C)</b>	0.998
<b>Flash Point (closed cup) (°F)</b>	234
<b>Equivalent Wt/{H}</b>	102
<b>Recommended Use Level (phr, EEW=190)</b>	55

**TABLE 2: TYPICAL HANDLING PROPERTIES\***

<b>Mixed Viscosity @ 77°F (25°C) (cP)</b>	2,200
<b>Gel Time [150g mix @ 77°F (25°C)] (min)</b>	23
<b>Thin Film Set Time @ 77°F (25°C) (h)</b>	4.0
<b>Peak Exotherm [100g mix @ 77°F (25°C)] (°F)</b>	305
<b>Peak Exotherm Time (min)</b>	29

**TABLE 3: TYPICAL PERFORMANCE\***

<b>[7 day cure @ 77°F (25°C)]</b>	
<b>Heat Deflection Temperature (ASTM D648-264 psi) (°F)</b>	136
<b>Flexural Strength (psi)</b>	11,300
<b>Flexural Modulus (thousand psi)</b>	305
<b>Tensile Strength (psi)</b>	5,800
<b>Tensile Modulus (thousand psi)</b>	506
<b>Elongation (%)</b>	1.4
<b>Barcol Hardness (Model GYZJ-935)</b>	78
<b>Bond Strength (mild steel to mild steel) (psi)</b>	1,600

\* Ancamine 2072 curing agent formulated with standard Bisphenol-A based (DGEBA, EEW=190) epoxy resin.

**SUPPLEMENTARY DATA\***

1. Comparison of Ancamine 2072 curing agent with Ancamine MCA curing agent (with 11,000 cP viscosity, standard liquid epoxy resin with an EEW = 190).

	Ancamine MCA	Ancamine 2072
Mixed Viscosity @ 77°F (25°C) (cP) <sup>a</sup>	1,600	2,200
Gel Time [150 g mix @ 77°F (25°C)] (min)	23	23
Peak Exotherm [100g mix @ 77°F (25°C)] (°F/min)	241/38	305/29
Thin Film Set Time:		
@ 77°F (25°C) (h)	5	4.5
@ 41°F (5°C) (h)	17	15
Pendulum hardness build-up @ 36°F (2°C):		
% final hardness after 2 days	12	14
3 days	23	33
4 days	35	57
7 days	52	63
14 days	61	74
21 days	100	100
7 days adhesion to damp concrete (psi)	145 (interface failure)	>200 (concrete failure)

2. Comparison of Ancamine 2072 curing agent with Ancamine MCA curing agent (with 6,000 cP viscosity, bisphenol-A/bisphenol-F-based epoxy resin blend with an EEW = 180).

	Ancamine MCA	Ancamine 2072
Thin Film Set Time:		
@ 77°F (25°C) (h)	6	6
@ 41°F (5°C) (h)	23	22

3. Relative resistance of Ancamine 2072 curing agent compared with Ancamine MCA curing agent toward carbamation/water spotting (with 11,000 cP viscosity, standard liquid epoxy resin with an EEW = 190).

	Ancamine MCA	Ancamine 2072
41 ± 2°F/90 ± 5% Relative Humidity	Resistant after 4 days	Not resistant after 7 days
73 ± 4°F/50 ± 5% Relative Humidity	Resistant after 1 day	Resistant after 4 days

\* Full details of the test methods are available on request.

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