

**ANCAMINE<sup>®</sup> 1638****Curing Agent****DESCRIPTION**

Ancamine<sup>®</sup> 1638 curing agent is a modified aliphatic amine designed for use with liquid epoxy resin cured at ambient or elevated temperature. It has very low viscosity and imparts high strength and modulus.

**TYPICAL PROPERTIES**

Property	Value	Unit
Appearance	Amber Liquid	
Colour	2	Gardner
Viscosity @ 77°F	100	cP
Amine Value	1,070	mg KOH/g
Specific Gravity @ 77°F	1.03	
Density @ 77°F	8.6	lb/gal
Flash Point (closed cup)	217	°F
Equivalent Wt/{H}	31	
Recommended Use Level (EEW=190)	15	phr

**ADVANTAGES**

- Low viscosity
- High reactivity and fast set time
- Low loading
- Heat resistance characteristics
- High strength and modulus
- Good resistance to mineral acids, aqueous alkali solutions, water and aromatic hydrocarbons

**APPLICATIONS**

- Structural and general-purpose adhesives
- Trowelable flooring and mortars
- Gel coats
- Patch repair compounds and grouts
- Accelerator for other amine-based curing agents

## STORAGE AND HANDLING

Refer to the Safety Data Sheet for Ancamine 1638 curing agent.

## 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.

## TYPICAL CURE SCHEDULE

**2 to 7 days at ambient temperature. Gel at ambient temperature plus 2 hours at 212°F.**

## TYPICAL HANDLING PROPERTIES\*

Property	Value	Unit
Mixed Viscosity @ 77°F	4,680	cP
Gel Time (150g mix @ 77°F )	15	min
Thin Film Set Time		
@ 77°F	2.5	h
@ 40°F	5.5	h
Peak Exotherm (100g mix @ 77°F)	338	°F
Peak Exotherm Time	21	min

\* Ancamine 1638 curing agent formulated with standard Bisphenol-A based (DGEBA, EEW=190) epoxy resin.

## TYPICAL PERFORMANCE\*

Property	Value	Unit
<b>(Cured 7 days @ 77°F)</b>		
Glass Transition Temperature	127	°F
Compressive Strength @ Yield	13,900	psi
Compressive Modulus	383	thousand psi
Tensile Strength	5,800	psi
Tensile Modulus	599	thousand psi
Tensile Elongation @ Break	1.6	%
Flexural Strength	14,700	psi
Flexural Modulus	665	thousand psi
<b>Cure Schedule 2</b>		
Heat Deflection Temperature (ASTM D648-264 psi)	204	°F
Barcol Hardness (Model GYZJ-935)	78	
Bond Strength (mild steel to mild steel)	1,650	psi

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