

ANCAMINE® 1638 Curing Agent**DESCRIPTION**

Ancamine® 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.

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 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.

TYPICAL CURE SCHEDULE

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

TABLE 1: TYPICAL PROPERTIES

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

TABLE 2: TYPICAL HANDLING PROPERTIES*

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

TABLE 3: TYPICAL PERFORMANCE*

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

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

Epoxy Curing Agents and Modifiers

ANCAMINE® 1638 Curing Agent

EVONIK CORPORATION

7201 Hamilton Blvd.
Allentown, PA 18195
1 800 345-3148
Outside U.S. and Canada 1 610 481-6799

For Technical Information and Support:

Americas: picus@evonik.com
EMEA: apcse@evonik.com

Disclaimer

The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto.

