

ANCAMINE® 2910 Curing Agent**DESCRIPTION**

Ancamine 2910 curing agent is a versatile, low viscosity hardener designed to cure liquid epoxy resin at elevated temperature. The unique chemistry offers a longer working time than traditional curing agents. The combination of low viscosity and long pot life can enhance processing of complex woven fabrics by optimum fiber wetting, minimized material waste and improved overall throughput. It is recommended for use in cure-in-place-pipe, composites' processing, electronics and industrial electrical applications.

ADVANTAGES

- Longer working time
- Low exotherm
- Low viscosity

APPLICATIONS

- Cure-in-Place-Pipe
- Composites – Filament winding, VARTM
- Resin Infusion
- Potting and encapsulation

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 2910 curing agent.

RECOMMENDED CURE SCHEDULE

- 2 h @ 150°F/65°C
- Post cure @ higher temperatures (200°F/100°C) can be done depending on processing flexibility and final product performance needs.

TABLE 1: TYPICAL PROPERTIES

Appearance	Amber Liquid
Color (Gardner; ASTM D1544)	max. 8
Viscosity¹ @ 77°F / 25°C (mPa.s)	30-60
Specific Gravity @ 77°F / 25°C (lb/gal)	7.76
Equivalent Wt/{H}	38
Recommended Use Level² (PHR)	20

TABLE 2: TYPICAL HANDLING PROPERTIES²

Mixed Viscosity¹ @ 77°F/ 25°C (mPa.s)	3,000
Gel Time³ 150 g mix @ 77°F/ 25°C (min)	600-700
Time to 250K mPa.s¹ @ 77°F/ 25°C (min)	1,150

TABLE 3: THERMAL PERFORMANCE²

Glass Transition Temperature⁴ (°F/°C)	142°F	61°C
Glass Transition Temperature⁵ (°F/°C)	192°C	89°F

TABLE 4: MECHANICAL PERFORMANCE - CAST PANEL²

Tensile Strength (ASTM D638)	10.32 ksi	71 MPa
Tensile Modulus	0.43 Msi	2.8 GPa
Tensile Elongation at Break	5.2%	5.2%
Flexural Strength (ASTM D790)	18.4 ksi	126.7 MPa
Flexural Modulus	0.48 Msi	3.3 GPa
Compressive Strength (ASTM D695)	14.6 ksi	101 MPa
Compressive Modulus	0.34 Msi	2.33 GPa

TABLE 5: MECHANICAL PERFORMANCE - COMPOSITE PANEL²

ILSS 0° Longitude / 90° Transverse (ASTM D2344)	6.8/1.7 ksi	47/12 MPa
Flexural Strength - 0° Longitude (ASTM D790)	161.5 ksi	1,114 MPa
Flexural Modulus - 0° Longitude	6.3 Msi	43.4 GPa

Footnotes:

- (1) Brookfield RVTD, spindle 27
- (2) Bisphenol-A based epoxy resin (EEW=190)
Cure schedule cast and composite panel: 2 h @ 150°F/65°C
Composite panel by vacuum-assisted resin transfer molding
Fiber type: E-glass (275 g/m²) Unidirectional
Fiber volume: 60 ± 3 %
- (3) Techne Gelation Timer, 150 g mix
- (4) DSC @ 10°C/min second heating scan
- (5) DMA @ 3°C/min – Three point bending (Tan Delta)

Epoxy Curing Agents and Modifiers

ANCAMINE® 2910 Curing Agent

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