

**ANCAMIDE® 506** Curing Agent**DESCRIPTION**

Ancamide 506 is an aliphatic amidoamine curing agent designed for use with liquid epoxy resin. In comparison with other members of the Ancamide 500 series of amidoamines, Ancamide 506 has the longest pot life and lowest viscosity. These properties together with a very low exotherm and non-critical loading make it suitable for casting, wet lay-up laminating and various civil engineering applications including concrete repair and flooring.

Ancamide 506 can also be used with cycloaliphatic amines such as Ancamine 1618 or 2143 to formulate high-solids coatings.

**ADVANTAGES**

- Very long pot life
- Low viscosity

**APPLICATIONS**

- Composites and wet lay up laminates
- Flooring
- Concrete repair
- High-solids coatings

**SHELF LIFE**

At least 24 months from the date of manufacture in the original sealed container at ambient temperature. Material may crystallize or solidify upon exposure to low temperatures. Crystallized or solidified material can be utilized after melting at elevated temperatures without impacting handling or physical properties. It is recommended that the material be heated to 50-70°C while mixing continuously for 1 hour. Once the solidified material has fully homogenized, it can be cooled to room temperature and utilized under normal conditions.

**STORAGE AND HANDLING**

Refer to the Safety Data Sheet for Ancamide 506 curing agent.

**TYPICAL PROPERTIES**

<b>Appearance</b>	Amber liquid
<b>Colour <sup>1</sup> (Gardner)</b>	12
<b>Viscosity <sup>2</sup> @ 25°C [mPa.s]</b>	200-500
<b>Amine Value <sup>3</sup> [mg KOH/g]</b>	410-440
<b>Specific Gravity @ 21°C</b>	0.93
<b>Equivalent Wt/{H}</b>	110
<b>Recommended use Level <sup>4</sup> [PHR]</b>	50

**TYPICAL HANDLING PROPERTIES<sup>4</sup>**

<b>Mixed Viscosity <sup>2</sup> at 25°C, [mPa.s]</b>	1,500
<b>Gel Time <sup>5</sup> (150g mix at 25°C), [mins]</b>	400
<b>Thin Film Set Time <sup>6</sup> 25°C, [h]</b>	23
<b>Typical cure schedule:</b>	
<b>(i) 7-14 days at ambient</b>	
<b>(ii) 2 days @ 25°C + 2h @ 100°C</b>	

**TYPICAL PERFORMANCE PROPERTIES<sup>4</sup>**

<b>Cure Schedule (ii)</b>	
<b>Tensile Strength <sup>7</sup>, [MPa]</b>	47
<b>Tensile Modulus <sup>7</sup>, [GPa]</b>	2.0
<b>Flexural Strength <sup>8</sup>, [MPa]</b>	73
<b>Flexural Modulus <sup>8</sup>, [GPa]</b>	1.3
<b>Heat Distortion Temperature <sup>9</sup>, [°C]</b>	58
<b>Tensile Elongation at Break [%]</b>	2.0

## Footnotes:

- (1) ASTM D 1544-80
- (2) Brookfield RVTD, Spindle 4
- (3) Perchloric Acid Titration
- (4) With Bisphenol A diglycidyl ether (EEW=190)
- (5) Techne GT-3 Gelation Timer
- (6) BK Drying Recorder Phase III
- (7) ISO 527
- (8) ISO 178
- (9) ASTM D648

Epoxy Curing Agents and Modifiers

# ANCAMIDE® 506 Curing Agent

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