

Product information

ANCAMINE[®] 1482

Curing Agent

DESCRIPTION

Ancamine 1482 is a liquid eutectic combination of aromatic polyamines designed for use in the elevated temperature cure of liquid epoxy resin. Relative to conventional solid aromatic amines Ancamine 1482 has the advantage of permitting mixing of epoxy resin and curing agent at lower temperatures and hence extending the working life. When fully cured with liquid epoxy resins Ancamine 1482 gives excellent mechanical properties and chemical resistance. These properties together with high heat resistance make this product suitable, using controlled handling procedures, for use in the preparation of filament wound tanks and pipe, casting and laminating applications.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Dark brown liquid/ crystalline solid		
Colour	>18		ASTM D 1544-80
Viscosity @ 25°C	550-1,250	mPa.s	Brookfield RVTD, Spindle 4
Amine Value	750-790	mg KOH/g	Perchloric Acid Titration
Specific Gravity @ 21°C	1.16		
Equivalent	37	Wt/{H}	
Recommended use Level	19	PHR	With Bisphenol A diglycidyl ether (EEW=190)

ADVANTAGES

- Excellent chemical resistance
- High mechanical properties

APPLICATIONS

- Controlled heat cure applications
- Filament winding
- Castin

SHELF LIFE

At least 24 months from date of manufacture in original sealed container stored undercover at ambient temperature away from excessive heat and humidity. If crystallisation occurs, warming to 40-50°C will re-liquify.

STORAGE AND HANDLING

Ancamine 1482 contains DDM (4,4'-Diaminodiphenyl methane). The prime route for exposure to DDM based products is by skin contact and it is known that absorption into the body is rapid. It is therefore recommended that personal protection is worn at all times when handling Ancamine 1482. Good local exhaust ventilation is also essential to maintain low exposure level. Refer to the Safety Data Sheet for Ancamine 1482 curing agent.

TYPICAL HANDLING PROPERTIES

Property	Value	Unit	Method
Mixed Viscosity @ 25°C	2100	mPas	Brookfield RVTD, Spindle 4
Gel Time (150g mix @ 25°C)	45	min	Techne GT-3 Gelation Timer
Thin Film Set Time @ 25°C	7	h	BK Drying Recorder Phase III
Shore D 20°C	51/79	8/24 h	DIN 53505
Shore D 10°C	38/71	16/24 h	DIN 53505
Typical cure schedule	2- 7 days		

TYPICAL HANDLING PROPERTIES

Gel Time5 (150g mix at 25°C), [mins] Techne GT-3 Gelation Timer 220

TYPICAL PERFORMANCE PROPERTIES

Property	Value	Unit	Method
Tensile Strength	68	MPa	ISO 527
Tensile Modulus	2.9	GPa	ISO 527
Tensile Elongation	4.2	%	
Flexural Strength	131	MPa	ISO 178
Flexural Modulus	2.8	GPa	ISO 178
Heat Distortion Temperature	160	°C	Scale 1-5 (5 is best)

HEADLINE

2 h at 80°C plus 4 h at 150°C

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