

ANCAMINE[®] 2379

Curing Agent

DESCRIPTION

Ancamine 2379 is a modified cycloaliphatic adduct designed for use with liquid epoxy resin at ambient temperatures.

TYPICAL PROPERTIES

Property	Value	Unit
Appearance	Almost colourless liquid	
Colour, max	2	Gardner
Viscosity @ 25°C	70-110	mPa.s
Amine Value	250-350	mg KOH/g
Specific Gravity @ 25°C	1.0	
Flash Point (closed cup)	166	°C
Equivalent	82-90	Wt/{H}
Recommended Use Level (EEW=190)	47	PHR

ADVANTAGES

- Low viscosity
- Good chemical resistance
- Excellent colour and colour stability

APPLICATIONS

Ancamine 2379 is suitable for use in solvent-free or high solids coatings. In addition, it is recommended for self-leveling and screed flooring applications where good chemical resistance is required.

CHEMICAL RESISTANCE

Excellent against distilled water, detergent solution, alkalia and weak mineral acids. Very good against strong mineral acid in which it is simply discoloured. Good against acetic acid and ethanol and moderate against toluene. It has poor resistance to ketones and glycol ethers.

SHELF LIFE

At least 24 months from the date of manufacture in the original sealed container stored under cover at ambient temperature away from excessive heat and humidity.

PACKAGING AND HANDLING

Refer to the Safety Data Sheet for Ancamine 2379 curing agent.

TYPICAL HANDLING PROPERTIES

Property	Value	Unit
Mixed Viscosity @ 25°C	1,840	mPa.s
Gel Time (150g mix @ 25°C)	31	min
Thin Film Set Time @ 25°C	8	h
Peak Exotherm (100g @ 25°C)	130	°C
Time to Peak Exotherm	36	min

TYPICAL CURE SCHEDULE

2-5 Days @ 25°C

TYPICAL PERFORMANCE PROPERTIES

Property	Value	Unit
Heat Distortion Temperature	48	°C
Shore D Hardness	75	
Flexural Strength	114	N/mm ²
Flexural Modulus	8.48	KN/mm ²
Tensile Strength	36	N/mm ²
Tensile Modulus	5.74	KN/mm ²
Tensile Elongation Break	0.72	%

RATE OF CURE

Temperature (°C)	Beck Koller	
	Tack-free time (h)	Hard-dry time (h)
10	11.5	17.5
25	5.75	8.0

THROUGH CURE

Temperature (°C)	Koenig Hardness (secs) Cure Time				
	1 Day	2 Days	4 Days	5 Days	7 Days
10	21	105	123	127	137
25	143	210	203	217	-

Shore D Hardness	@ 10°C	Develops 95% of ultimate hardness after 4 days cure
Shore D Hardness	@ 25°C	Develops 95% of ultimate hardness after 1 day cure
MEK Double Wipe Resistance	@ 10°C	Develops resistance to >250 double wipes after 4 days cure
MEK Double Wipe Resistance	@ 25°C	Develops resistance to >250 double wipes after 2 days cure

CHEMICAL RESISTANCE

Immersion of cured disc for three weeks following 2 weeks at 25°C.

	% Weight Change	% Hardness Change (Shore D)	Degree of Attack
Toluene	0.8	88.2	LR*
2-Ethoxy Ethanol	21.5	-	NR
2-Butanol (MEK)	Destroyed	-	NR
Industrial Ethanol	6.9	82.4	LR
Water	1.0	98.6	R
5% Teepol	1.0	90.8	R
10% Sodium Hydroxide	0.9	97.3	R
50% Sodium Hydroxide	-0.1	95.9	R
10% Sulphuric Acid	1.7	97.3	R
70% Sulphuric Acid	0.6	98.7	R* (Discoloured)
10% Hydrochloric Acid	1.1	98.6	R
20% Nitric Acid	2.2	98.6	R* (Discoloured)
10 Acetic Acid	5.0	83.6	LR

R	Unaffected (>90% of original hardness)
R*	Slight surface attack
LR	Slight softening
LR*	Softening and attack such as discolouration
NR	Moderate to severe disintegration - No longer provides protective barrier

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