Epoxy Curing Agents and Modifiers

ANCAMINE® MCA Curing Agent

DESCRIPTION

Ancamine MCA is a modified cycloaliphatic amine Mannich base curing agent for epoxy resin. The high reactivity at low temperatures and under conditions of high humidity and even under water make Ancamine MCA particularly suitable for use in new to old concrete bonding adhesives, concrete repair mortars and flooring applications. Special features of this curing agent include good resistance to carbonation and water spotting and excellent chemical resistance. Ancamine MCA can also be used in conjunction with amidoamines and polyamides for concrete bonding and with solid epoxy resin in solvent based industrial and semi-decorative floorings and coatings.

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.

Contains phenol — some discolouration can be expected with time.

STORAGE AND HANDLING

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

CHEMICAL RESISTANCE

Excellent against water, salt water, dilute mineral acids, alkalis, aqueous detergents: hydrocarbon and certain chlorinated solvents

TYPICAL PROPERTIES

Appearance	Low viscosity, straw coloured Liquid
Colour (Gardner)	7 max
Viscosity @ 25°C [mPa.s]	100-300
Amine Value [mg KOH/g]	288-317
Specific Gravity @ 25°C	1.03
Flash Point (closed cup), °C	110
Equivalent weight per [H]	102
Recommended Use Level	55 parts per 100 parts of liquid epoxy resin having an (EEW=190)

TYPICAL HANDLING PROPERTIES

Mixed Viscosity @ 25°C [mPa.s]	1,600
Gel time (155g mix @ 25°C), mins	25
Thin film set time @ 25°C, h	6
Peak exotherm (100g mix @ 25°C)	116
Time to peak exotherm, minutes	38

TYPICAL CURE SCHEDULE

2-7 days at ambient temperature
Gel at ambient temperature plus 2 h @ 60°C

TYPICAL PERFORMANCE

(Following 7 days at ambient temperature	
Heat distortion temperature, °C	48
Barcol hardness (Model GYZJ 935)	80
Bond strength (mild steel), N/mm²	10
Flexural strength, N/mm²	77
Flexural modulus, KN/mm²	1.74
Tensile strength, N/mm²	50
Tensile modulus, KN/mm²	1.9
Elongation at break, %	3.5

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