

ANCAMINE® 2836 Curing Agent

DESCRIPTION

Ancamine 2836 curing agent is a high functional Mannich Base, designed for use in two part epoxy formulations. Ancamine 2836 curing agent provides a good balance of working life and high chemical resistance. The higher functionality of Ancamine 2836 enable to formulate epoxy systems with high glass transition temperature (T_g) and it can also be used as a co-curing agent to boost the T_g values of other cycloaliphatic curing agents. These properties make Ancamine 2836 curing agent ideal for formulating chemically resistant coatings including application that might require high chemical resistance at elevated temperatures, linings and floorings.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	clear amber liquid		
Colour	3	Gardner	ASTM D 1544
Viscosity @ 23°C	4,500 - 8,000	cP	Brookfield RVTD, Spindle 4
Amine Value	575-590	mg KOH/g	Perchloric Acid Titration
Specific Gravity @ 21°C	1.04		
Glass Transition, T _g *	133	°C	DSC - ramp 10 °C/min. (with bisphenol-A based resin)
Equivalent	55	Wt/{H}	
Recommended use Level	29	PHR	Cured with bisphenol-A based epoxy resin (EEW=190)

*with Bisphenol-A Resin at stoichiometric ratio

ADVANTAGES

- . Fast cure and rapid property development
- . High chemical resistance
- . Long pot life
- . Suitable for ambient and heat cure systems
- . High T_g development

APPLICATIONS

- Tank linings
- Oil and gas coatings requiring chemical resistance at elevated temperatures
- Co-curing agent to boost glass transition temperature and chemical resistance of other curing agents

TYPICAL PERFORMANCE PROPERTIES

Ancamine 2836 pre-mixed with benzyl alcohol at a 60/40 ratio prior to curing with epoxy resin

Property	Value	Unit	Method
Viscosity @ 23°C	290	cP	
Use Level (60/40 blend) PHR	46		
Gel Time @ 23°C	43	mins	Techne GT-3 Gelation Timer, 150 g mix
Tg (°C)	75.3		DSC - ramp rate 10°C/min
Thin Film Set Time 23°C	3.5 / 5.5	h	ASTM D 5895 - BK Drying Recorder, Phase 2/3, 60 % relative humidity
Thin Film Set Time 5°C	10.0 / 13.0	h	ASTM D 5895 - BK Drying Recorder, Phase 2/3, 60 % relative humidity
Persoz Pendulum Hardness 1d/7d @ 23 °C	278/310	s	ASTM D 4366
Shore D hardness @23°C, 7d	82D		
Carbamation Resistance 1d @23°C	4		ISO 2812 (wet patch method), after 24hrs (scale 1-5, 5=best)
1 d @ 5°C	3		

Chemical Immersion (28 days)

Ancamine 2836 curing agent formulated with Bis-phenol-F based (EEW = 175) epoxy resin

	% Weight Change
Butyl Cellosolve	1.49
70% Sulfuric Acid	0.75
10% Acetic Acid	5.25
Toluene	0.80
Methanol	7.86
Ethanol	4.64
Xylene	0.15
10% Lactic Acid	3.22

TYPICAL CURE SCHEDULE

2 - 7 days at ambient temperature.

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.

PACKAGING AND HANDLING

Refer to the Safety Data Sheet.

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