Product information

ANCAMINE® 2791

Curing Agent

DESCRIPTION

Ancamine 2791 curing agent is a low-viscosity curing agent designed for high temperature epoxy systems. Ancamine 2791 curing agent is intended to be used as a sole curing agent and is designed for in-situ post-cure (starting at ~80°C). Ancamine 2791 curing agent is recommended for use with LER for normal conditions and with Novolac/Bis-F for harsher conditions.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Amber Liquid		
Color	8	Gardner	
Viscosity @ 25°C	70-100	cPs	Brookfield viscometer DV-II+, spindle 21, 25ºC
Amine Value	495-540	mg KOH/g	Perchloric acid titration
Equivalent Wt/(H)	54		
Recommended Use Level	28	phr	EEW=190
Specific Gravity @ 25°C	1.00	g/mL	Formulated with Liquid Epoxy Resin (EEW=190) at the recommended use level of 28 phr, 150g mix

ADVANTAGES

- High temperature service
- High chemical resistance
- Crystallization-resistant at lower temperatures
- Excellent Atlas cell test performance

APPLICATIONS

- Primer for storage tanks and transfer pipes
- Protective coatings
- Marine coatings
- Industrial maintenance coatings

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SHELF LIFE

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.

TYPICAL CURE SCHEDULE

2 to 10 days at ambient temperatures.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Ancamine 2791 curing agent.

TYPICAL HANDLING PROPERTIES (@ 25°C)

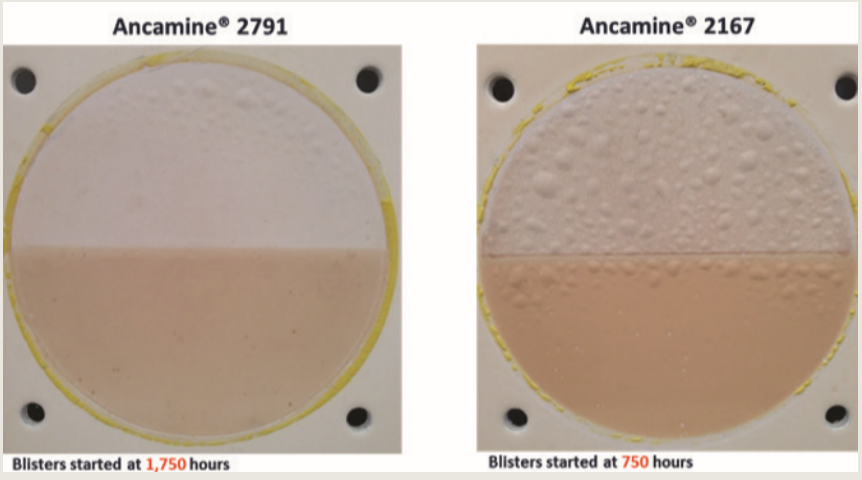
Property	Value	Unit	Method
Gel Time (150g mix mass)	84	min	Formulated with Liquid Epoxy Resin (EEW=190) at the recommended use level of 28 phr, 150g mix Techne GT-6 Gelation Timer
Thin Film St Time @ 25ºC			Formulated with Liquid Epoxy Resin (EEW=190) at the recommended use level of 28 phr, 150g mix. Mickle Laboratory Engineering Co. BK drying recorder, 25ºC / 50% RH
Stage I	2:45	h	
Stage II	6:15	h	

TYPICAL PERFORMANCE

Property	Value	Unit	Method
Glass Transition Temperature	123	°C	Formulated with Liquid Epoxy Resin (EEW=190) at the recommended use level of 28 phr, 150g mix

ATLAS CELL PERFORMANCE

Operating experience has shown that many pipes and tanks experience a “cold wall effect” that accelerates moisture permeation through a coating applied to the warmer side of a partition that separates fluids at two different temperatures. The Atlas cell laboratory test was designed to create the cold wall effect in order to test candidate linings, and to provide insight on the corrosion control properties of an organic coating exposed to a chemically aggressive environment. Atlas cell testing is governed by industry standard test methodologies (C868 and NACE TM0174).The following pictures show the performance of Ancamine® 2791 curing agent in the Atlas cell, using Ancamine® 2167 curing agent as a comparative product known to have good high temperature properties. A non-optimized model formulation was used containing epoxy Novolac resin blended with Bis-F resin along with the curing agent. The Atlas cell solution contained 70,000 ppm of chlorite ion, 21 g/L of sodium acetate and was pH adjusted to 5 using hydrochloric acid.



CHEMICAL RESISTANCE PERFORMANCE

The chemical resistance of Ancamine 2791 curing agent was tested at ambient temperatures with LER. Ancamine 2791 demonstrates very good chemical resistance.

FIGURE 1

Hardness (Shore D) for Ancamine® 2791 coating as a function of chemical exposure

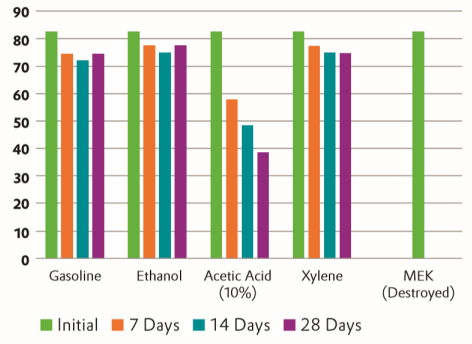
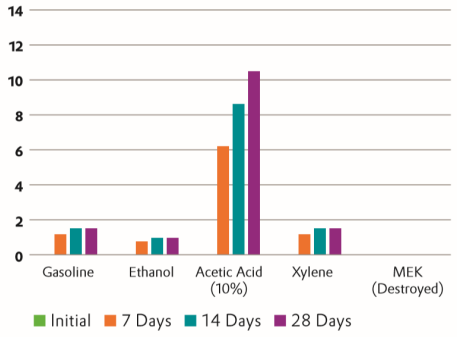


FIGURE 2

Mass increase (weight %) of Ancamine 2791 coating as a function of chemical exposure



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