

Ara[®] Cool 3077 Epoxy Curing Agent

Formulated Amine Hardener for Low Emission Rapid Curing Systems

Ara[®] Cool 3077 is an amine based fast curing hardener without nonylphenol, benzyl alcohol or bisphenol-A. It is best used as an accelerator and modifier for slower reacting hardeners, such as polyamidoamines and polyamides, for curing at low temperatures.

Applications

- Solvent-free (low emission), low temperature curing coatings for metal and concrete
- Accelerator for slower curing systems

Features

- Does not contain benzyl alcohol, nonylphenol or bisphenol-A
- Low viscosity
- Outstanding hardness development even at 0°C
- Good blush resistance

Typical Properties*

Property	Ara [®] Cool 3077 Epoxy Curing Agent
Visual Appearance	Clear, amber liquid
Color, Gardner, max.	8
H+ Active Equivalent Weight (g/eq.)	70 - 75
Use Level with Araldite GY 6010 (phr)	40
Amine Value (mg KOH/g)	380 - 420
Viscosity at 25°C (cP)	400 - 540
Density at 25°C (g/cm ³ , lb/gal)	1.01, 8.4
Flash Point, Closed Cup (°C)	> 93

* Product data are based on Huntsman's test methods. Copies are available upon request.

Formulation Data

Unless otherwise stated, the data were determined with typical production batches using standard test methods. They are typical values only, and do not constitute a product specification.

Clear Coating Formulation Data

Formulation		Parts by weight	
Araldite® GY 6010 Epoxy Resin		100	
Ara® Cool 3077 Epoxy Curing Agent		40	
Curing Properties @ 22°C / 50% Relative Humidity		Test Method	Value
Mixed Viscosity, 25°C (cP)		Cone and Plate Visc.	5670
Pot life, 100g (min)		GT-S gel timer	15
Tack-free time (hr)		Circular dry time recorder	1.5
Dry Through time (hr)		Circular dry time recorder	2.5
Film Appearance		Visual	Clear, glossy
Gloss, 20° / 60° (%)		ASTM D523	104 / 107
Persoz Hardness (s), 1 / 3 / 7 days		ANSI/ISO 1522	330 / 336 / 350
Time to Water Spot Resistance (hr)		No visible defect	72 - 96

Curing Properties @ 10°C / 80% Relative Humidity	Test Method	Value
Pot life, 100g (min)	GT-S gel timer	15
Tack-free time (hr)	Circular dry time recorder	1.5
Dry Through time (hr)	Circular dry time recorder	4.5
Film Appearance	Visual	Semigloss, blushed
Gloss, 20° / 60° (%)	ASTM D523	74 / 74
Persoz Hardness (s), 1 / 3 / 7 days	ANSI/ISO 1522	225 / 296 / 316
Time to Water Spot Resistance (hr)	No visible defect	> 7 days

Curing Properties @ 5°C / 70% Relative Humidity	Test Method	Value
Tack-free time (hr)	Circular dry time recorder	2.0
Dry Through time (hr)	Circular dry time recorder	6.0
Film Appearance	Visual	Clear, glossy
Gloss, 20° / 60° (%)	ASTM D523	98 / 102
Persoz Hardness (s), 1 / 3 / 7 days	ANSI/ISO 1522	200 / 261 / 276
Time to Water Spot Resistance (hr)	No visible defect	48

Curing Properties @ 0°C / 50% Relative Humidity	Test Method	Value
Tack-free time (hr)	Circular dry time recorder	1.5
Dry Through time (hr)	Circular dry time recorder	8.5
Film Appearance	Visual	Clear, glossy

Storage

Ara® Cool 3077 epoxy curing agent should be stored in a dry place, in its sealed original container, at temperatures between 2°C - 40°C (36°F - 104°F). Under these storage conditions the shelf life is 24 months from date of manufacture. The product should not be exposed to direct sunlight.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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