

Advanced Materials

Accelerator 2950

Co-reacting Accelerator

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Key properties

- . Co-hardener when used with polyamine, polyamidoamines and their adducts
- · Good compatibility with amine hardeners
- Effective accelerator and co-hardener in polyurethane systems
- Good for low temperature and waterborne systems

Description

Accelerator 2950 is an effective accelerator and/or co-hardener when used in combination with polyamines, polyamidoamines and their adducts. It is used to cure liquid epoxy resins such as Araldite® GY 6010, PY 302-2 resin, or similar resins for solvent-free coatings and flooring systems. It is also used to cure solid epoxy resins or their solvent cuts such as Araldite® GZ 571 KX 75 resins for solvent containing marine and maintenance coatings. Accelerator 2950 is also an effective accelerator and co-hardener in polyurethane systems when used at 1-3% on binder.

Applications

In solvent free coatings:

- At low use levels, Accelerator 2950 produces the same effect as the industry standard tertiary amine such as Accelerator 960-1
- At high use levels, e.g., 20phr, Accelerator 2950 increases cure speed dramatically and coatings are open to foot traffic after 24 hours at 5°C.

In solvent containing coatings:

- At low use levels, Accelerator 2950 produces the same effect as Accelerator 960-1 but nearly twice the pot life.
- At high use levels, Accelerator 2950 give the same effect as in solvent free coatings. In polyurethane systems:
- More dramatic results than in epoxy systems.
- Extremely short de-molding times for tooling systems.

Product data

	Accelerator 2950
Visual Appearance	Pale yellow liquid
Color, Gardner, max.	10
H ⁺ Active Equivalent Weight (g/eq.)	~ 75
Viscosity at 25°C (cP)	2 000 – 6 000
Amine Value (mg KOH/g)	640 - 700
Density at 20°C (g/cm³, lb/gal)	0.99, 8.3
Flash Point, Closed Cup (°C)	> 110

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



Formulations

Accelerator 2950 as a Co-hardener in Epoxy System (Parts by Weight)

Formulation No.	1	2			
Araldite® GY 6010 Epoxy Resin ¹	100	-			
Araldite® GZ 571 KX 75 Epoxy Resin ²	-	100			
Accelerator 2950	39	13			
Gel time ³ , 100 g, 23°C (min)	23	40			
Curing Properties ⁴ @ 23°C / 50% Relative Humidity					
Cure-through time (hr)	1.0	1.5			
Film Appearance	Glossy	Glossy			
Blushing ⁵	None	None			
@ 5°C / 80% Relative Humidity					
Cure-through time (hr)	2.5	4.5			
Film Appearance	Glossy	Glossy			
Blushing	Slight	None			

Accelerator 2950 in Polyamidoamine, Solvnet-based Coating (Parts by Weight)

Formulation No.	1	2	3		
Araldite® GZ 571 KX 75 Epoxy Resin	100	100	100		
Aradur® 815-2 Epoxy Curing Agent	38	38	38		
Accelerator 960-1	-	1.4	-		
Accelerator 2950	-	-	0.7		
Xylene / n-butanol (4:1)	72	65	70		
Gel time, 100 g, 23°C (min)	360	90	120		
Curing Properties @ 23°C / 50% Relative Humidity					
Dry-through time (hr)	7.0	6.0	5.0		
Film Appearance	Glossy	Glossy	Glossy		

 $^{^{1}}$ Standard bisphenol-A liquid epoxy resin (epoxy equivalent weight: 182 - 192)

 $^{^{2}}$ Solid bisphenol-A epoxy resin solution (epoxy equivalent weight: $450-530)\,$

³ Tested by TECAM® gelaion timer

⁴ Tested by Gardner[®] Circular Drying Time Recorder on a 10 mil wet coating

⁵ Visual



Storage

Accelerator 2950 should be stored at room temperature in the original sealed container. The expiry date is indicated on the label.

Handling precautions

Caution

To protect against any potential health risks presented by our products, the use of proper personal protective equipment (PPE) is recommended. Eye and skin protection is normally advised. Respiratory protection may be needed if mechanical ventilation is not available or is insufficient to remove vapors. For detailed PPE recommendations and exposure control options consult the product MSDS or a Huntsman EHS representative.

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