

Aradur[®] 825-2

Standard Polyamidoamine Hardener

General	Aradur 825-2 is a polyamide hardener produced by the condensation of dimer acids and selected polyamines. Aradur 825-2 has good wetting characteristics. When used to cure Araldite [®] epoxy resins, it provides excellent flexibility, toughness and good overall chemical resistance.	
Chemical Description	Standard polyamide hardener	
Applications	Solvent-borne coatings for industrial maintenance Adhesives Castings Caulking Potting compounds Sealing	
Advantages	Excellent mechanical properties Excellent corrosion resistance Excellent adhesion Non-critical mixing ratio Suitable for the formulation of coatings compliant with FDA 21 CFR 175.300	
Typical Properties*	Visual Appearance	Clear, no contamination
	Viscosity @ 40°C, mPa s (cPs)	8,000 - 12,000
	Color, Gardner, max.	9
	Amine Value, mg KOH/g	330 - 360
	H ⁺ Active Equivalent, g/eq.	100 - 150
	Density, @ 25°C (77°F), g/cm ³ (lb/gal)	0.96 (8.0)
	Flash Point, Closed Cup, °C (°F)	160 (320)

* Typical properties are based on Huntsman's test methods. Copies are available upon request.

Starting Formulation

Aradur 825-2 may be used to cure both Araldite liquid epoxy resins and low molecular weight solid epoxy resin solutions either at room or elevated temperatures. The ratio of epoxy resin to polyamide resin will determine the ultimate coating properties. The normal range of polyamide to epoxy resin is 33 to 100 phr*, 50 - 70 phr being typical for most general purpose applications.

The cure schedule depends upon the total formulation used (i.e., resin, fillers, solvents, etc.) and the conditions of application (i.e., temperature, humidity, thickness, etc.). The time varies inversely with temperature.

Coal Tar Modified Epoxy Coating

(Corps of Engineers Specification CW 09940)

Part A	Pounds / 100 Gal.
Coal Tar Pitch (70 - 75°C Softening Point ¹)	291
Aradur 825-2	96
Magnesium Silicate ²	258
Xylene	166
Ethyl Alcohol (95%)	8
Thixotropic Agent ³	13
Accelerator 960-1 ⁴	11
Part B	
Araldite 6010	215
Total (Parts A & B)	1,058

*phr=parts per hundred resin

Raw Material Suppliers

¹ CP-301-Material manufactured by Allied Chemical specifically to meet CE-1409 (C-200) specification.

² Nyltal 3X, R.T. Vanderbilt Co. or equal

³ Bentone 38 (NL Industries) or equal

⁴ Accelerator 960-1, Huntsman

Packaging & Storage

Aradur 825-2 is supplied in a 400 pound steel drum. It has a shelf life of two years when stored away from excessive heat and humidity in the original sealed container.

**Handling/Safety
Precautions**

Warning: Severe eye and skin irritant.

Wear appropriate equipment to prevent personal contact.
Wear eye protection to prevent any possibility of eye contact.
Avoid breathing vapor, mist or spray.
Use with adequate ventilation.
Wash thoroughly after handling.

**Read Material Safety Data Sheet Before Using.
For Industrial Use Only.**

First Aid**In case of contact:**

Eyes: Immediately flush eyes with water for at least 15 minutes. Get medical attention.

Skin: Wash thoroughly with mild soap and water.

Inhalation: Remove to fresh air. Give oxygen if necessary.

Ingestion: If conscious, give water. Get medical attention.

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Note

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