

Araldite[®] AY 103 Resin / Hardener HY 991 Adhesive

Product Description

Araldite[®] AY 103 / Hardener HY 991 epoxy adhesive is a transparent, low viscosity system suitable for bonding a variety of materials, including metal, ceramic and wood. The epoxy adhesive is easy to apply either manually by spatula and stiff brush, or mechanically using metering, mixing and coating equipment. The adhesive cures at temperatures from 68°F (20°C) to 212°F (100°C).

Features

- Transparent system
- Low viscosity



Typical Properties*

Property	Araldite [®] AY 103 Resin	Hardener HY 991	Mixed System	Test Method
Appearance	Pale yellow liquid	Amber liquid		Visual
Viscosity at 25°C, cP	1,600	23,000	3,500	ASTM D2393
Density, g/cm ³	1.15	0.93		ASTM D792

*Properties are based on Huntsman test methods. Copies are available upon request.

Processing

Mix Ratio

Product	Parts by weight	Parts by volume
Araldite [®] AY 103 Resin	100	100
Hardener HY 991	40	50

Processing Data

Parameter	Value	
Pot life at 25°C	90 minutes	
	24 hours at 68°F (20°C), or	
Typical cure cycles	2 minutes at 140°F (60°C), or	
	15 minutes at 212°F (100°C)	

Typical Physical Properties

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.

Property		Value
Lap shear strength, psi (MPa)		
Cure temperature	77°F (25°C)	2,300 (15.9)
	140°F (60°C)	1,500 (10.3)
	176°F (80°C)	700 (4.8)

Storage

Araldite[®] **AY 103 Resin** and **Hardener HY 991** should be stored in a dry place, in the original sealed containers, at temperatures between 2°C and 40°C (36°F and 104°F). Under these storage conditions, the products have a shelf life of **3 years** (from date of manufacture). The products should not be exposed to direct sunlight.

If stored below 60°F, the adhesive should be brought to 60°F - 77°F and conditioned at this temperature for some time prior to use.

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

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

Advanced Materials Technical Datasheet

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