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Product Data

ARALDITE[®] AY 103 Resin Hardener HY 991 TRANSPARENT, LOW VISCOSITY EPOXY ADHESIVE

DESCRIPTION: Araldite AY 103 resin/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).

TYPICAL PROPERTIES:	<u>Property</u>	<u>Test Method</u>	<u>Test Values⁽¹⁾</u>	
			<u>Resin</u>	<u>Hardener</u>
	Color/Appearance	Visual	Pale Yellow Liquid	Amber Liquid
	Specific Gravity	ASTM D-792	1.15	0.93
	Viscosity, cP @ (75°F) 25°C	ASTM D-2393	1,600	23,000

TYPICAL MIXED PROPERTIES:	<u>Property</u>	<u>Test Method</u>	<u>Test Values⁽¹⁾</u>
	Resin/Hardener Ratio (by weight)	ASTM D-2471	100/40
	Resin/Hardener Ratio (by volume)		100/50
	Viscosity, cP @ 77°F (25°C)		3,500
	Pot Life, min. @ 77°F (25°C)		90

CURE SCHEDULES:	<u>Temperature</u>	<u>Cure Time</u>
	68°F (20°C)	24 hrs.
	140°F (60°C)	2 minutes
	212°F (100°C)	15 minutes

TYPICAL CURED PROPERTIES:	Lap Shear Strength	Shear Strength psi (MPa)
	<u>Cure Temperature</u>	
	77°F (25°C)	2,300 (15.9)
	140°F (60°C)	1,500 (10.3)
	176°F (80°C)	700 (4.8)

CAUTION:

Huntsman Advanced Materials Americas Inc. maintains up-to-date Material Safety Data Sheets (MSDS) 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. Copies of the latest MSDS may be requested by calling our customer service group at 800-367-8793 or emailing your request to adhesives_group@huntsman.com.

FIRST AID!

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation: Remove subject to fresh air.

Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

IMPORTANT LEGAL NOTICE:

Sales of a referenced product ("Product") are subject to the general terms and conditions of sale of Huntsman Advanced Materials Americas Inc. ("Huntsman").

WARRANTY: Huntsman warrants to the Buyer that the Product will conform to the published specifications for that Product at the time of manufacture, and that the Product will be free from defects in material and workmanship in normal use.

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WARNING: Technical data and results are based upon tests under controlled laboratory conditions and must be confirmed by Buyer by testing for its intended conditions of use. The Product has not been tested for, and therefore is not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for any such uses.

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