

Advanced Materials**ARALDITE[®] AV 8574 Resin
Hardener HV 8574****HEAT- AND CHEMICAL-RESISTANT EPOXY ADHESIVE**

DESCRIPTION

ARALDITE AV 8574 Resin/Hardener HV 8574 epoxy adhesive is a two-component system suitable for applications requiring elevated service temperature and excellent chemical resistance. The epoxy adhesive has a long pot life and will cure at room temperature. The cure speed can be accelerated with heat.

APPLICATIONS

Metal bonding
Filter bonding
High-temperature applications

ADVANTAGES

High temperature performance
Good chemical resistance
Long open time

**TYPICAL
PROPERTIES**

<u>Property</u>	<u>Test Method</u>	<u>Test Values⁽¹⁾</u>	
		<u>Resin</u>	<u>Hardener</u>
Color/appearance	Visual	Gray	Black
Specific Gravity	ASTM D-792	1.43	
Viscosity, cP @ 77°F (25°C)	ASTM D-2393	150,000	34,000

**TYPICAL MIXED
PROPERTIES**

<u>Property</u>	<u>Test Method</u>	<u>Test Values⁽¹⁾</u>
Reaction Ratio (by weight)	ASTM D-2471	100R/41H
Reaction Ratio (by volume)		100R/50H
Color	Visual	Black
Pot Life, @ 77°F (25°C), hrs.	ASTM D-2471	2 – 2.5
Mixed viscosity, @ 77°F (25°C), cP	ASTM D-2393	118,000

¹Tested @ 77°F (25°C)**RECOMMENDED
CURE SCHEDULES**

<u>Temperature</u>	<u>Minimum Cure Time</u>
140°F(60°C)	60 minutes
176°F (80°C)	15 minutes
212°F(100°C)	10 minutes
248°F (120°C)	5 minutes

TYPICAL PHYSICAL PROPERTIES

	<u>Test Method</u>
Lap Shear Strength, psi (MPa)	ISO 4578
Effects of Test Temperature	
Load applied 10 minutes after specimens reach test temperature.	

<u>Test Temperature</u>	<u>Test Values⁽¹⁾</u>
-76°F (-60°C)	1700(11.7)
77°F (25°C)	3400(23.4)
176°F (80°C)	3400(23.4)
300°F (149°C)	1400(9.6)
400°F(204°C)	400(2.7)

After Skydrol Immersion (100 hours)

<u>Test Temperature</u>	<u>Test Values⁽¹⁾</u>
-76°F (-60°C)	2400 (16.5)
77°F (25°C)	2200 (15.2)
400°F (204°C)	390 (2.6)

After Heat Aging (100 hours @ 250°F/121°C)

<u>Test Temperature</u>	<u>Test Values⁽¹⁾</u>
-76°F (-60°C)	2100 (14.5)
77°F (25°C)	2350 (16.2)
400°F (204°C)	410 (2.8)

TYPICAL CURED PROPERTIES (Not for specification purposes)

	<u>Test Values</u>	<u>Test Method</u>
Ultimate Compressive Strength, psi (MPa)	18,000 (124)	ASTM D-695
Compressive Modulus, psi (MPa)	320,000 (2,206)	ASTM D-695
Ultimate Flexural Strength, psi (MPa)	15,000 (103)	ASTM D-790
Flexural Modulus, psi (MPa)	780,000 (5,379)	ASTM D-790
Ultimate Tensile Strength, psi (MPa)	7,300 (50.3)	ASTM D-638
Tensile Modulus, psi (MPa)	820,000 (5,655)	ASTM D-638
Tg per DMA, °F (°C)	290 (143)	ASTM D-4065

¹Tested after 7 days @ 77°F (25°C) unless otherwise noted.

NOTE: These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed in establishing product specifications, please consult with our Quality Control Department.

STORAGE AND SHELF LIFE

ARALDITE epoxy adhesive components should be stored in their original, sealed containers at room temperature. When stored at temperatures from 59-77°F (15-25°C), the resin and hardener will remain in useable condition for 12 months from date of shipping from Huntsman.

**SAFETY/HANDLING
PRECAUTIONS**

Do not use or handle this product until the Material Safety Data Sheet has been read and understood

Personal Hygiene*Safety precautions at workplace*

Protective clothing	Yes
Gloves	Essential
Arm protectors	Recommended when skin contact is likely
Goggles/safety glasses	Yes

Skin protection

Before starting work	Apply barrier cream to exposed skin
After washing	Apply barrier or nourishing cream

Cleansing of contaminated skin

Dab off with absorbent paper, wash with warm water and alkali-free soap, then dry with disposable towels. Do not use solvents.

Clean shop requirements

Cover workbenches/areas with light colored paper. Use disposable beakers.

Disposal of spillage

Soak up with sawdust or cotton waste cloth and deposit in plastic-lined bin.

Ventilation

Of workshop	Renew air 3 to 5 times an hour
Of workplaces	Exhaust fans should be used to prevent operators from inhaling vapors.

FIRST AID

Contamination of the eyes by resin, hardener or mix should be treated immediately by flushing with clean, running water for 10 to 15 minutes. A doctor should then be consulted.

Material smeared or splashed on the *skin* should be dabbed off, and the contaminated area then washed and treated with a cleansing cream (see above). A doctor should be consulted in the event of severe irritation or burns. Contaminated clothing should be changed immediately.

Anyone taken ill after inhaling vapors should be moved out of doors immediately.

In all cases of doubt call for medical assistance.

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 888-564-9318 or emailing your request to adhesives@huntsman.com.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

IMPORTANT LEGAL NOTICE

Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. ("Huntsman"). The following supercedes Buyer's documents.

Huntsman warrants that at the time and place of delivery all Products sold to Buyer shall conform to the specifications provided to Buyer by Huntsman.

While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN (EXCEPT AS SET FORTH ABOVE REGARDING CONFORMANCE WITH SPECIFICATIONS PROVIDED TO BUYER BY HUNTSMAN) IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES.

No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights.

The Product may be or become hazardous. The Buyer should obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, together with proper shipping, handling and storage procedures for the Product, and should comply with all applicable governmental laws, regulations and standards relating to the handling, use, storage, distribution and disposal of, and exposure to the Product. Buyer shall also take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product, and the containers or equipment in which the Product may be handled, shipped or stored.

Araldite is a registered trademark of Huntsman Corporation or an affiliate thereof in one or more, but not all countries.

© 2007 Huntsman Advanced Materials Americas Inc.

Main Offices :

Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**

8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400