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Product Data

ARALDITE[®] AV 8574 Resin Hardener HV 8574 HEAT/CHEMICAL RESISTANT ADHESIVE

DESCRIPTION: Araldite AV 8574 resin/Hardener HV 8574 epoxy adhesive is a two-part system suitable for applications requiring elevated service temperature and good 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:**

Tested @ 77°F(25°C)

| <u>Property</u> | <u>Test Method</u> | <u>Test Values</u> |
|-----------------------------------|--------------------|--------------------|
| Reaction Ratio (by weight) | | 100R/41H |
| Reaction Ratio (by volume) | | 100R/50H |
| <u>Araldite 8574 Resin</u> | | |
| Color | Visual | Gray |
| Specific Gravity, g/cc | ASTM D-792 | 1.43 |
| Viscosity, cP @ 77°F (25°C) | ASTM D-2393 | 150,000 |
| <u>Hardener 8574</u> | | |
| Color | Visual | Black |
| Viscosity, cP @ 77°F (25°C) | ASTM D-792 | 34,000 |
| <u>Mixed System</u> | | |
| Color | Visual | Black |
| Viscosity, cP @ 77°F (25°C) | ASTM D-2393 | 118,000 |
| Pot Life, hours @ 77°F (25°C) | ASTM D-2471 | 2-2.5 |

CURING SCHEDULE:**Temperature****Minimum Cure
Time**

| | |
|---------------|------------|
| 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:** Not for specification purposes.

Lap Shear Strength, psi (MPa)
ISO 4578, tested at 77°F (25°C) unless otherwise noted
Effect of Test Temperature
Load applied 10 minutes after specimens reach test temperature.

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

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

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

TYPICAL PHYSICAL PROPERTIES: Not for specification purposes.

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

NOTE ON TYPICAL PROPERTIES: 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/
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.

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

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