

Single Component, Microelectronic Conductive Epoxy Adhesive
Technical Product Bulletin

PRODUCT DESCRIPTION:

AA-DUCT 2979 is a fast curing one part epoxy adhesive with superior electrical conductivity and bonding capability.

AA-DUCT 2979 has been shown to retain their properties through hundreds of hours of rapid temperature cycling and has also high impact absorption and stress resistance.

AA-DUCT 2979 contains no volatile, harmful solvents or lead, and conforms to all of the requirements of the solder replacement market.

PRODUCT PROPERTIES:

| | |
|------------------------------|--|
| Color | Silver |
| Cure Type | Heat cure |
| Benefits | <ul style="list-style-type: none"> • One component no mixing required • High strength • Excellent mechanical, electrical properties |
| Substrates | Excellent choice for Integrated Circuits, aluminum, magnesium, steel, bronze, nickel, ceramic, glass, and G-10 epoxy glass boards. |
| Operating Temperature | -40°C (-40°F) to +165°C (329°F) |
| Out gassing, NASA | Passes |

UNCURED PROPERTIES:

| | |
|------------------------------------|---|
| Viscosity @ 25 °C cps | 65,000 ±1000 @Temperature 77.0 °F |
| Specific Gravity gm/cc | 3.11 |
| Reactive solids contents, % | 100 |
| Pot Life | 2 months at 25°C (77.0 °F) 6 months at -40°C |

CURE SCHEDULE:

| | |
|-------------------|------------------|
| 1 hour | At 125°C (257°F) |
| 15 minutes | At 150°C (302°F) |

CURED PROPERTIES:

| | |
|---|-------------------------------|
| Hardness, Shore D | 86 |
| Volume Resistivity ohm. cm | 3 X 10 ⁻⁴ |
| Glass Transition Temp, Tg | 45 °C (113 °F) |
| Lap Shear Strength alum to alum, PSI | 9200 |
| Adhesive Bond Strength PSI | 1750 |
| Thermal Conductivity, W/m.K | 0.90 |
| Coefficient of Thermal Expansion | 57 X10 ⁻⁶ in/in/°C |

GENERAL INFORMATION:

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

HOW TO USE:

1. Carefully clean and dry all surfaces to be bonded.
2. Apply AA-DUCT 2979 to the prepared surfaces.
3. Bulk size: Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use
4. Allow the product to cure according to the cure schedule.

AVAILABILITY:

This epoxy can be supplied in many different packages.

Atom Adhesives

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