

PRODUCT DESCRIPTION:

AA-DUCT 2924 is a two part electrically conductive composition developed for low shrinkage; low resistivity bonding applications where good electrical and physical properties over a wide temperature range (up to 190°C) are required.

AA-DUCT 2924 is smooth paste formulation of refined pure silver and epoxy is free of solvents and copper or carbon additives. It can be used -- after REQUIRED high temperature cure cycle -- for the assembly, manufacture and repair of electronic modules, printed circuits, integrated circuits, electrical contacts, capacitors, wave guides and flat cables, for high-frequency RF shielding, and for applications where a "hot" soldering iron is impractical.

When cured AA-DUCT 2924 is a hard, dimensionally stable, conductive material which is resistant to water, weathering, gases and vapors, lubricants, fuels, alcohol, and also to those salts, salt solutions, mild acids and alkalis, and other organic and inorganic compounds with which silver itself is compatible.

GENERAL PROPERTIES:

Appearance	Silver
Cure Type	Heat cure / Room Temperature
Benefits	<ul style="list-style-type: none"> • High strength • Perfect bond
Mix Ratio by weight	100:5 / Resin:Hardener
Substrates	Excellent choice aluminum, copper, magnesium, steel, bronze, nickel, kovar, ceramic, glass, phenolic and G-10 epoxy glass boards.
Typical Applications	Assembly, manufacture and repair of electronic modules, printed circuits, integrated circuits, electrical contacts, capacitors, wave guides and flat cables, for high-frequency RF shielding, and for applications where a "hot" soldering iron is impractical.

UNCURED PROPERTIES:

Mixed Viscosity	25,000
Specific Gravity, mixed	2.66
Reactive solids contents, %	100
Pot Life	3 hours
Shelf life	1 year

CURE SCHEDULE:

2 hours	@ 100°C
1 hour	@ 125°C
24 hours	@ Room Temperature

CURED PROPERTIES:

Hardness, Shore D	85
Adhesive bond strength	1270 psi
Volume Resistivity ohm-cm	<0.0003

THERMAL PROPERTIES:

CTE, linear	27.2 µin/in-°F @ Temperature 68.0 °F
Thermal Conductivity	1.50 W/m-K 10.4 BTU-in/hr-ft ² -°F
Glass Transition Temp, Tg	92.0 °C 198 °F
Operating Temperature	-60 to 190 °C

GENERAL INFORMATION:

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

HOW TO USE:

1. Carefully clean and dry all surfaces to be bonded.
2. Apply AA-DUCT 2924 completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.
3. 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. Some ingredients in this formulation provided may crystallize when subjected to low temperature storage. A gentle warming cycle of 52°C for 30 minutes prior to mixing components may be necessary. Crystallized epoxy components do not react as well as liquid components and should be re-dissolved prior to use for best results.

AVAILABILITY:

This epoxy can be supplied in many different packages.

Atom Adhesives

Email: info@atomadhesives.com
200 Allens Ave, Providence, RI 02903
Phone: (888) 522-6742 - Fax: (877) 522-6742