

PRODUCT DESCRIPTION:

AA-DUCT 905 is a single component epoxy, formulated with pure silver powder combined with organic binders and solvents to produce electrically conductive paths, films or patterns over non-conductive substrates.

AA-DUCT 905 shows slight settling when stored for a long period of time, no caking and will re disperse to a smooth homogeneous state.

AA-DUCT 905 formulation produces electrically conductive paths on a wide variety of surfaces including plastics, rubber, cloth, thermoplastic, paper, wood and many others.

AA-DUCT 905 is designed for use in diversified applications such as microwave EMI & RFI shielding, in the assembly or repair of printed circuit boards, wave-guides, electronic modules, flat cable, static shielding, connections and circuitry. This epoxy is designed for screening and micro product adhesion applications with the best dispensing capabilities of up to 30 gauge / 0.01" / 0.255mm.

PRODUCT PROPERTIES:

Appearance	Silver
Cure Type	Heat cure
Benefits	<ul style="list-style-type: none"> • High strength • Perfect bond • EMI & RFI shielding • Wave guides • The best dispensing capabilities of up to 30 gauge/0.01" / 0.255mm.
Substrates	<ul style="list-style-type: none"> • Integrated Circuits • Aluminum • Copper • Magnesium • Steel • Bronze • Nickel • Kovar • Ceramic • Glass • Phenolic • G-10 epoxy glass boards.
Catalyst	Anhydride
Hardness, Shore D	83
Typical Applications	Microwave EMI & RFI shielding, in the assembly or repair of printed circuit boards, wave-guides, electronic modules, flat cable, static shielding, connections & circuitry.

CURE SCHEDULE:

15 min	@ 120°C, 248 °F
10 min	@ 150°C, 302°F
5 min	@ 175°C, 347°F

UNCURED PROPERTIES:

Viscosity @ 25 °C cps	6,800
Density gm/cc	2.35
Silver , %	70-72
Shelf life	6 Months
Operating Temperature	-45°C to 170°C
Pot Life @ 25 °C	6 months @ 25°C

PHYSICAL CHARACHTERISTICS:

Sheet Resistivity:	10-12 mΩ/sq
Adhesion Tensile Strength:	1000 N/cm2 (1500 lb/in2)
Lap shear Strength:	1400 N/cm2 (2000 lb/in2)
Thermal Conductivity:	0.04J/(cm.s. °C):[0.01cal/(cm.s. °C)]
Specific heat:	0.30J/(g. °C) :[0.07 cal/g. °C]
Coefficient of Thermal Expansion:	3x10 ⁻⁵ (m/m)/ °C
Modulus of Elasticity	4x10 ¹⁰ Pa (6x10 ⁵ lb/in2)
Poisson's Ratio:	0.35

ELECTRICAL PROPERTIES:

Volume Resistivity ohm. cm	< 0.001
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AVAILABILITY:

This epoxy can be supplied in many different packages.

GENERAL INFORMATION:

This product contains organic solvent. The following precautions should be exercised: Use with adequate ventilation. Avoid prolonged contact with skin, if contact with skin occurs, wash area immediately with a soap and water avoid prolonged breathing of vapor. Dangerous if swallowed. Refer to MSDS for more details.

HOW TO USE:

AA-DUCT 905 conductive silver coated is formulated for application by brushing, spraying, dipping, banding or stylus. Recommended thinners may be added for individual compositions, to replace solvent losses or to make slight adjustments. Only the recommended thinner should be used.

In handling and using organic solvents, the safety precautions recommended by the solvent supplier should be observed.

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