



UK DISTRIBUTORS OF
REINHARDT-TECHNIK
 Metering & Mixing
 Dispensing Systems



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Elecolit ® 325 – Technical data sheet

CONDUCTIVE SILVER EPOXY ADHESIVE ELECOLIT 325 is a two component pure silver filled epoxy adhesive which combines the excellent adhesive properties of the epoxy with the electrical conductivity of pure silver. It is easy to use because equal amounts of Part A and B (resin and hardener) are mixed together and it has a 1 to 2 hour pot life.

ELECOLIT 325 may be processed with dispensers, stamps or through screen printing. Curing occurs at room temperature. Increased heat yields very short curing times. **ELECOLIT 325** provides optimum solutions for cold curing applications thanks to excellent conductivity and gap filling attributes.

- Applications:
1. Connecting heat sensitive components to printed circuit boards.
 2. Bonding wave guide plumbing, hybrid circuit assembly.
 3. Connecting ground wires to components and making conductive lines.
 4. Replace metal solder where temperature or convenience in the application is required.
 5. Plating base.
 6. Chip bonding for discrete devices and hybrid circuits.

Technical Data

Colour:	Silver
Resin:	Epoxy
Filler:	Silver

Uncured Properties

Viscosity		Paste-like
Flash Point		-
Pot-life [min.]	PE-Norm P019	120 approx.
Density [g/cm ³]	PE-Norm P003	3.2 approx.

Curing

16	hours at	25 °C	0.001 Ohm x cm
2	hours at	50 °C	
30	minutes at	100 °C	0.0005 Ohm x cm
15	minutes at	120 °C	
5	minutes at	150 °C	

Cured Properties

Temperature Resistance [°C]	PE-Norm P030	-40 to150
Hardness [Shore D]	PE-Norm P052	79
Volume resistivity [Ohm x cm]	ASTM-D 257-93	0.0005
Water Absorption [mass-%]	PE-Norm P053	< 0.5
Tg [°C] (DSC)	PE-Norm P009	25 to 45
CTE [ppm/K]	PE-Norm P017	31
Thermal conductivity [W/m-K]	ASTM 1530	3.8

Mechanical Data

Lap shear strength (steel/steel (RT Curing)) [MPa]	PE-Norm P013	8.2 approx.
Lap shear strength (steel/steel (15' @ 120 °C)) [MPa]	PE-Norm P013	17.1 approx.

Instructions for use

Surface Preparation

The surfaces to be bonded should be free of dust, oil, fat or any other dirt in order to optimise reproducible results. Lightly soiled surfaces can be cleaned with cleaner IPA to create a suitable working surface.

Application

Our Elecolit 2-C products are delivered in separate packing units. Resins can crystallize at deep temperature storage- this process will be reversible by heating for 1hour at 40°C. The components A and B have to be homogenised well, weigh out in mixing ration and homogenised with each other for min. 2 minutes. From now, the pot life time starts and the adhesive has to be applied rapidly. You can dispense or use them for screen printing processes.

Curing

For curing heat must be applied. In some cases they will cure even at room temperature. But higher temperature will reduce the curing time. Higher curing temperature will lead to better electrical conductivity and less volume resistivity.

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