



ELPOX SC 515

ELECTRICALLY CONDUCTIVE SILVER EPOXY

- * EASY FOR USE
- * FOR MULTIPURPOSE PROFESSIONAL APPLICATIONS
- * VERY GOOD ADHESION PROPERTIES

GENERAL DESCRIPTIONS:

ELPOX SC 515 is a one component epoxy base and silver filled formulation with electrically conductive properties. This formulation is especially designed for chip bonding in microelectronic and optoelectronic applications. It is very easy to use and fast curing paste in temperature over 150°C.

ELPOX SC 515 is very soft, smooth and thixotropic paste with an active solvent and very low viscosity value. This system has excellent handling characteristics at room temperature.

SPECIFICATIONS:

Number of components	One
Consistency	Soft, smooth paste
Color	Bright silver
Percentage of fillers	66 ± 2%
Viscosity*	130 000 - 140 000 cps (1 rpm) 45 000 - 55 000 cps (5 rpm) 25 000 - 35 000 cps (10 rpm)
Thixotropy index (1/10)	4.7
Recommended curing schedule with air-circulated oven	150°C – 120 min. 180°C – 15 min. 200°C – 5 min.
Curing with IR tunnel oven	Ramp: 20° - 120°C – 2.5 min. Ramp: 120° - 180°C – 5.0 min. Ramp: 180° - 20°C – 3.5 min.
Shelf life	12 months (when storage at 15°C – unopened. Do not refrigerate).

* Brookfield DVII; SSA#14; 25°

TECHNICAL PROPERTIES (*):

Specific gravity	2.6 – 2.7 g/cm ³
Thermal conductivity	3.0 – 3.2 W/mK
Electrical resistivity after curing	0.006 – 0.03 m Ωm
Glass transition temperature (Tg)	90°C (TMS Method)
Max. operating temperature	Continuous - 150°C Intermittent - 190 - 260°C
Lap shear strength (Al-Al)	1.4 – 1.7 kG/mm ²
Weight loss	0.4% up to 190°C

(*) - Typical value for number of tests.

ATTENTION:

ELPOX SC 515 is supplied as a single component material and is available in variety of screw-top jar sizes. Minimum quantity is 100 grams.

1. Mix **ELPOX SC 515** – inside container very thoroughly before use, using wood or plastic spatula only. Mix smoothly from the bottom of the container. Mix carefully - not to whip air into the product.
INSURE ELPOX SC 515 IS AT ROOM TEMPERATURE WHEN YOU WILL START WORKING WITH.
2. Prepare consistency before use according your SPECIFICATION.
3. If you need, use AXMC **TH # 515** thinner. Thinner will change paste mechanical and electrical properties. Pls, do not exceed 1.0% of weight. After first tests pls let us know about your viscosity requirements – we will be able to change it for you.
4. Low mechanical and electrical properties and poor adhesion performance are symptomatic that paste is under curing conditions.
5. Refrigeration during shelf time is not necessary. Keep container with adhesive in temp. not lower 15°C. Before use, increase paste temperature very slowly.
6. Use paste with adequate ventilation.
7. Avoid skin and eye contact. If ingested, wash with soap and water and consult a physician immediately.
8. Tools should be clean by alcohol or other suitable solvents.

This information is based on data and tests believed to be accurate. **AMEPOX MC** makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with the use or inability to use this product.

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