



# ELPOX ER 63MN

*ELECTRICALLY CONDUCTIVE, PHENOLIC TYPE RESIN ADHESIVE*

- \* ELECTRICALLY CONDUCTIVE
- \* SCREEN PRINTING APPLICATION
- \* VERY GOOD ADHESION FOR COPPER
- \* EPOXY-PHENOLIC TYPE RESIN ADHESIVE

## GENERAL DESCRIPTIONS:

**ELPOX ER 63MN** is single component, electrically conductive, silver filled, epoxy-phenolic base resin adhesive. This paste is especially prepared for making connections to copper material and for through hole double sided PCB application.

**ELPOX ER 63MN** has high and stable electrical conductivity. This type is mostly for high-speed technological process. It doesn't dry out even on open screen during one shift working time.

## SPECIFICATIONS:

Number of components	One
Consistency	Floable paste
Color	Dark silver
Percentage of silver (inside ready paste)	63 ± 1%
Dry extract (total)	78 ± 1%
Specific gravity	2.5 – 2.7 g/cm <sup>3</sup>
Viscosity	28 500 – 30 000 cps (*)
Drying time before curing process	6 – 8 hours at room temperature, or 5 min. at temp. over 80°C
Recommended curing schedule with air-circulated oven	180°C – (40 – 60) min. 200°C – 20 min.
Recommended curing with IR heating tunnel	150°C in peak – 5 min. total time inside tunnel
Shelf life	6 months (when storage at 10°C – unopened)

(\*) - Brookfield DVII; SSA#14; 10 rpm; 25°C.

## TECHNICAL PROPERTIES (\*):

Electrical sheet resistivity (curing inside oven)	0.020 Ω/sq @ 1 mil.
Electrical sheet resistivity (curing inside tunnel)	0.025 Ω/sq @ 1 mil.
Electrical resistivity	(5.0 – 6.5) x 10 <sup>-5</sup> Ωcm
Pencil hardness	9H pencil hardness (one day after curing)
Range of service for continuous temperature	(-55)°C - (+150)°C
Max. operating temperature	Over 250°C for a several sec.

(\*) - Typical value for number of tests.

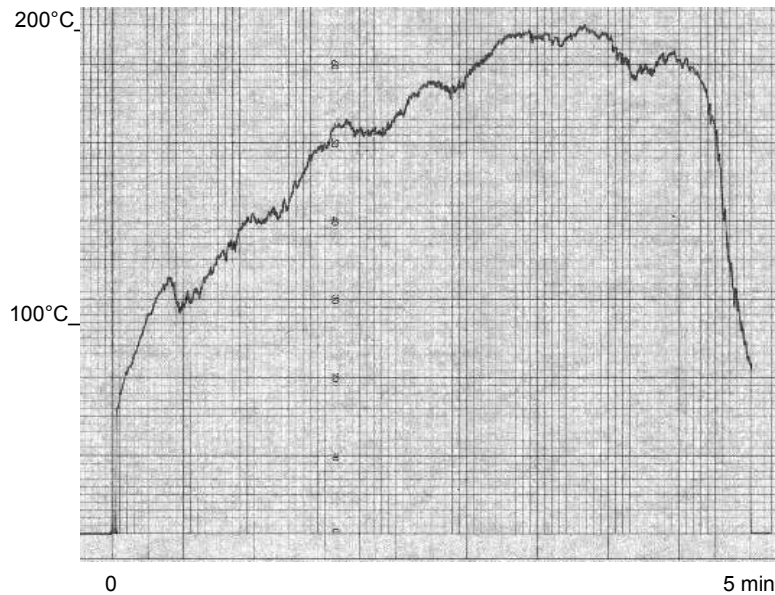


Fig.1. Example of heating tunnel profile for curing ER 63MN

## ATTENTION:

1. Product is ready for use, but should be mixed very thoroughly before use using wood or plastic spatula. Mix smoothly from the bottom of the container. Mix carefully - not to whip air into the product. **INSURE ELPOX ER 63MN IS AT ROOM TEMPERATURE WHEN YOU WILL START WORKING WITH. Refrigeration during shelf time is not necessary.**
2. Prepare consistency before use according your SPECIFICATION.
3. If you need, use AXMC **ER # 63EM** thinner. Thinner will change paste resistivity. Pls, do not exceed 1% of weight. After first tests pls let us know about your viscosity requirements – we will be able to change it for you.
4. Low conductivity and poor adhesion performance are symptomatic that paste is under curing conditions.
5. Refrigeration during shelf time not necessary, but useful. Keep container with lacquer in temp. no less 10 C. Before use, increase paste temperature very slowly.
6. Use paste with adequate ventilation.
7. Avoid skin and eye contact. If ingested, consult a physician immediately.
8. Clean by MEK or other suitable solvents. Allow screen to completely dry before using again.
9. Temperature during printing process must be kept between 20°C and 25°C, with relative humidity (RH) between 40% and 65%. This condition reduces static charges on the substrate.
10. When stored – keep container closed.

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.

( ex-er63mn )