



# THERMOPOX 85CT

THERMALLY CONDUCTIVE EPOXY

- \* NEW GENERATION THERMALLY CONDUCTIVE EPOXY
  - \* VERY HIGH THERMALLY CONDUCTIVE COEFICIENT
    - \* SMOOTH AND SOFT PASTE
      - \* NO ELECTRICALLY INSULATION MATERIAL

#### **GENERAL DESCRIPTIONS:**

**THERMOPOX 85CT** is two components, 100% solid - new generation thermally conductive formulation. This paste has special prepared copper type of filler with very high tap density value. At this way is possible to fill of **THERMOPOX 85CT** as high as 85% of this filler. Because copper is material with the best thermally coefficient value (after silver), is possible to offer formulation with extremely high and stable thermally properties over 2 W/mK (ov. 13 BTU in/ sqft hr F).

**THERMOPOX 85CT** is formulation with suitable working time, which allows sufficient time for all production applications. It possible to cure this system at room temperature initially also, with next post-curing in temperature range ab.100°C. Alternatively, the cure schedule may be shortened with moderate heat.

**THERMOPOX 85CT** has a very good adhesion to many different types of materials - especially glass, quartz, semiconductor chips and metals. Excellent thermally conductive properties are reason that **THERMOPOX 85CT** is ideal for all professional applications, where high heating occurs. This formulation is not electrically insulating material.

## **SPECIFICATIONS:**

Number of components	Two.
Mixing ratio A : B (by weight)	10:0.3
Consistency after mixing A+B	Heavy paste, 100% solids.
Color	Dark red.
Percentage of fillers	85 ± 1%
Viscosity	630 000 – 680 000 cps (*)
	630 – 680 Pa s.
Thixotropy index (1/10 rpm)	2.8 – 3.2
Recommended curing schedule	80° C - 40 min.
	100° C - 30 min.
	120° C - 15 min.
	150° C - 6 min.
Acceptable curing conditions	50° C – 2 hours + post curing
Pot life	2.5 hours @ 25° C.
Storage	6 months with closed container @ 25° C.

(\*) BROOKFIELD DVII; SSA#14; 1rpm; 25°C

#### **PHYSICAL PROPERTIES (\*):**

Specific gravity(A+B)	3.7 – 3.9 g/ccm.
Thermal conductivity	Min.: 1.4 – 2.2 W/mK.
Electrical resistivity	$> 5 \times 10 E (6) \Omega m$ (with thickness over 0.1mm)
Adhesion to ceramic after curing	No less like 0.8 kG

<sup>(\*) –</sup> Typical value for number of tests.

### **ATTENTION:**

**THERMOPOX 85CT** is supplied as a double component material and is available in a variety of screw-top plastic jar sizes only. Minimum quantity is 100 grams.

- Mix THERMOPOX 85CT Part "A" inside container very thoroughly before use. After adding hardener – Part "B", mix 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 THERMOPOX 85CT 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 # 85** thinner. Thinner will change paste mechanical properties. 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 mechanical properties and poor adhesion performance are symptomatic that **THERMOPOX 85CT** is under curing conditions.
- 5. Refrigeration during shelf time is useful. Keep container with formulation 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, alcohol or other suitable solvents.

#### **WARNING:**

Be careful on the case contacts with skin. When it occurs, wash immediately with soap and water.

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

(Thermo-85CT)