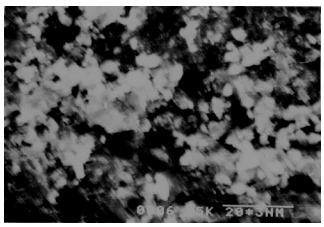
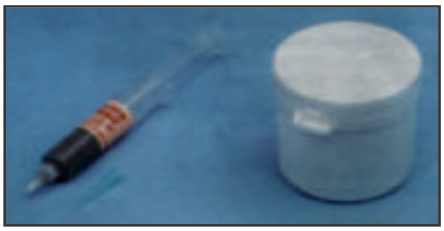
ELECTRICAL CONDUCTING PASTE

Applications:
These series of MECP grade of silver conducting pastes are available in more than 30 different grades, virtually covering all industrial and research applications, meeting diversified electrical, mechanical, thermodynamical/tribological and environmental specifications. On account of its high purity and consistence in quality, these electrical conducting pastes are the first choice of any research organization and industries dealing in semiconductors, ceramics piezoelectric, optics or sensor/mems related products.

Working Principle:
These metal conducting epoxies are either organic or inorganic in nature when these epoxies are mixed with hardner in predefined ratio and cured, the ultra fine silver particles come close, forming dense metallic matrix with very little interparticle spacing and at the same time deep penetration in to the voids of interface surface resulting in high electrical conductivity with ultra high bonding strength, having least corrosion/aging effect on its desired bonding properties.





Benefits:
1. High flash temperature / Better temperature operating range. 2. High dynamic yield stress/high performance to hard setting. 3. Easy re-mixing / low off state viscosity. 4. Non-abrasive/ chemically compatible. 5. High thermal conductivity 4. High thermal conductivity with high conductivity 6. Negligible expansion with least pinhole formation in bond. 7.Low weight loss during curing.

Mechanical/Electrical Specifications: **high electrical conductivity>10^{-3} ohm.cm**

Properties	**Technical Specifications**				
Product code	**MECP –0500**	**MECP –0300**	**MECP –0200**	**MECP-0100**	**MECP- 0050**
Base Mixing ratio (single part) Filler CTE unit volume [in/in/^{0} Fx10^{-6} (^{0} F) Specific Heat J/g^{0}C Tenile strength(psi)	**O.M.** **single component** **Silvers/Pt** **37** **0.60** **800**	**O.M.** **single component** **Silvers/Pt** **35** **0.59** **800**	**O.M.** **single component** **Silvers/Pt** **31** **0.65** **1000**	**O.M.** **single component** **Silvers/Pt** **30** **0.555** **1200**	**O.M.** **single component** **Silvers/Pt** **29** **0.54** **1200**
Min-Operating temperature ^{0}C **Curing -** *duration-15/30/60 min [max]-* **Thermal conductivity (10^4 W/m^2.^{o}C)** **Electrical resistivity (10^{-3}.ohm.cm)** **Color [single part]** Pot life [minutes]-options Shelf life	500 10^{o}C/2 min or150^{o}C/1h +cool+300^{o}C/10 min. 12 **200** grey/option 30/60 six month	300 10^{o}C/2 min or120^{o}C/1h +cool+200^{o}C/30 min. 10 **180** grey/option 30/60 six month	200 10^{o}C/2 min or 80^{o}C/1h +cool+160^{o}C/30 min. 08 **160** grey/option 15/30/100 six month	100 10^{o}C/2 minor 60^{o}C/15 min +cool+80^{o}C/15 min 07 **150** grey/option 15/30/120 six month	050 10^{o}C/2 minor 40^{o}C/15 min +cool+50^{o}C/15 min. 07 **130** grey/option 15/30/120 six month

1. Data is calculated with and without thermal polymer applied and may vary from lot to lot. 2. Thermal conductivity/electrical resistivity may vary w.r.t. temperature deviating from established empirical relation.

Application Notes:
The minimum order Quantity is 50 gm.
Keep the epoxies/hardner/thinner in cool.
All surfaces must be free of oil, grease, dirt, corrosives, oxides, paint or other foreign matter.
Two-component products should be mixed thoroughly. Preheat high viscosity epoxies to approximately 40-degree cel to facilitate pouring and mixing. Use motoron dispenser system for precise mixing.
In most cases, the adhesive should be applied to both surfaces maintaining a glue line of less than 500 micron. After assembling
The parts, press the assembly to reduce the air entrapment.
Epoxy/Hardner/Thinner may cause irritation of skin in some sensitive Persons. Use Gloves and Goggles.
Company makes no warranty express or implied concerning the Use of this product. The user assumes all risk of use or handling

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