CREATIVEMATERIALS

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ISO 9001 CERTIFIED

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124-31

TRANSLUCENT CONDUCTIVE INK

DESCRIPTION: 124-31 is a low cost translucent ink/coating with dissipative to conductive electrical properties for application by screen-printing, rotogravure, and syringe dispensing. The product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates**. The optical properties of this product allows the end user to print conductive traces without opacity at thicknesses up to and over a mil.** The proper use of this feature can result in a significant cost saving. Unlike conventional clear conductive materials, this product is able to be printed easily with little waste and without the use of expensive machinery. The 124-31 is very resistant to abrasion, scratching, flexing and creasing. Some applications for 124–31 include, but are not limited to, electroluminescent lamps, high resolution displays, and electronic labels.

TYPICAL PROPERTIES:

Viscosity (cps)	20,000 – 25,000
Filler	Antimony Tin Oxide
Crease Resistance	Excellent
Volume Resistance, max. (Ω-cm)	12.6
Sheet Resistivity (Ω/square/mil)	5,000
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to 200
Solids Content	30-45%

SUGGESTED HANDLING & CURING: 124-31 is ready to screen print as supplied. Further thinning in order to spin coat, flexographicaly print, and/or spray may be accomplished by by adding small amounts of CMI thinner #112-18, #112-19 and/or #105-36. Prior to use, be certain to mix well to allow the material to flow smoothly. Use of a plastic spatula avoids contaminating the material with shavings from the container. If air becomes trapped in the material from over mixing, degas the material or let it settle for 24 hours.

Optimum screen-printing of the material will yield a dry thickness of approximately 0.4 mil (10 microns). The recommended screen type and mesh is 155 mesh polyester and 200 mesh stainless steel. Reusable slow evaporating cleaning solvent will save you money and reduce your pollutants and is available as 102-03.

Best properties for most applications result when cured for 5 to 10 minutes at 110°C. Excellent properties are also obtained on a variety of substrates by curing at temperatures ranging from 50°C to 175°C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 6 months at 25°C; 12 months at 5°C.

SAFETY & HANDLING: Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

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