



## C-250J Carbon Screenprint Ink

### Description

C-250J is a low resistance carbon paste designed for screen printing membrane switches, printed flexible circuits and other printed electronic applications. It also has very good substrate adhesion and is compatible with our UV curable dielectrics and silver inks.

### Features

- Low resistance carbon paste ink designed for screen printing
- Good substrate adhesion including non-print treated PET films
- Excellent flexibility
- Good stability
- Compatible with our inks and dielectrics

### DRYING SCHEDULE

Drying is recommended at 120°C for approximately 3-10 minutes depending on oven heating elements, film thickness, and ambient air conditions.

### STORAGE AND SHELF LIFE

Shelf life is 3 years in unopened container, if stored in a dry area at 25°C (room temperature). Do not use product after the expiration date. Avoid sunlight during storage and use.

### SCREENING

It is essential to mix the material thoroughly before use to return the ink to a more desirable viscosity.



Example of printed heater

### TYPICAL PROPERTIES

Appearance	Black liquid
Viscosity Vt-04, No. 2 Spindle, 25°C	23,500 - 36,500 mPa-s
Volume Resistivity	$\leq 2.2E-2 \Omega \cdot \text{cm}$
Surface Resistivity	5.0 ohm/sq/mil
Pencil Hardness	H



### SCREENING RECOMMENDATIONS

Mesh Screen	Monofilament polyester (157 to 230 mesh) or a stainless steel (165 to 325 mesh) screen
Emulsion Thickness	Between .001" and .004"
Polyurethane Squeegee	Shore 'A' durometer between 60 and 70

### THINNING & CLEANUP

Use Solvent 40 to thin, if necessary, or to clean. All alcohol-based cleaners should be avoided in all cases for thinning and cleanup.

### DRYING

It is essential that all residual solvent be removed from this ink once it is applied. Incomplete drying will cause the ink to appear dry on the surface while trapping solvent underneath the surface and cause increased resistance which indicates solvent entrapment. Over time, this trapped solvent will migrate out of the ink, and can cause adhesion problems with any material, such as dielectrics, applied over the ink.

Evaluate the point-to-point resistance along one of the conductive paths after one pass through the drying oven or one cycle in a batch-drying oven. Run the substrate through another drying cycle. Measure the point-to-point resistance again along the same path and compare it to the original reading. If the resistance decreases by less than 10%, then the ink is essentially dry after the first drying cycle or pass through the oven. If the resistance decreases by more than 10%, then more drying time is required to completely remove the solvent.

### DISPOSAL

The material and its container must be disposed in accordance with all local, state, federal and/or international regulations.

### HANDLING

Consult Safety Data Sheet (SDS) for details on the handling procedures and product hazards prior to use. If you have any questions regarding handling precautions or product hazard, please email [productsafety@kayakuAM.com](mailto:productsafety@kayakuAM.com).

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