



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
- Able to be thermoformed for in-mold electronics applications
- 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 an 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.



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

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



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 clean and Solvent 20 to thin, if needed. 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.

Disclaimer

Notwithstanding anything to the contrary contained in any sales documentation, e.g., purchase order forms, all sales are made on the following conditions: All information contained in any Kayaku Advanced Materials, Inc. product literature reflects our current knowledge on the subject and is, we believe, reliable. It is offered solely to provide possible suggestions for the customer's own experiments and is not a substitute for any testing by the customer to determine the suitability of any of Kayaku Advanced Materials, Inc. products for any particular purpose. This information may be subject to revision as new knowledge and experience becomes available, but Kayaku Advanced Materials, Inc. assumes no obligation to update or revise any data previously furnished to a customer; and if currency of data becomes an issue, the customer should contact Kayaku Advanced Materials, Inc. requesting updates. Since Kayaku Advanced Materials, Inc. cannot anticipate all variations in actual end uses or in actual end-use conditions, it makes no claims, representations, or warranties, express or implied including, without limitation any warranty of merchantability or fitness for a particular purpose; and the customer waives all of the same. Kayaku Advanced Materials, Inc. expressly disclaims any responsibility or liability and assumes no responsibility or liability in connection with any use of this information including, without limitation, any use, handling, storage or possession of any Kayaku Advanced Materials, Inc. products, or the application of any process described herein or the results desired or anything relating to the design of the customer's products. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.