

Graphite based ink C 800 EI

APPLICATION

C 800 EI is a screen printable conductive ink based on a mixture of different grades of high purity graphites. It is designed to give a good balance between long open time on screens and short drying time in subsequent drying processes. Typical application include the production of low voltage circuitry on polyesters to protect silver pads and tracks from chemical attack and silver migration. C 800 EI can be used as a protective coating against electrostatic discharge.

Benefits

- high adhesion on all kinds of polyester films
- produces flexible dried layers
- compatible with Chimet[®] silver ink Ag 515 EI and many other conductive inks
- high resistance to ambient pollutions
- flexible low temperature drying cycles

PROCESSING

Printing

Stainless steel screen 200 – 280 mesh, polyester screen 61 to 90 wires. A polyurethane squeegee with a shore A durometer between 70 and 75 is recommended. Emulsion 20÷40 µm.

Curing conditions

C 800 EI can be dried immediately after printing at temperatures between 90°C and 150°C. Typical drying cycles for conventional air circulated ovens are 20'@90°C and 5'@130°C. Infra red drying can be successfully used.

Clean-up solvents

MEK, MIBK, ethyl acetate or similar solvents.

Thinning

C 800 EI is supplied ready for use and doesn't require dilution. If dilution is deemed necessary use thinner 0320IT (0.5÷1.5% by weight).

Table 1. TYPICAL INK PROPERTIES

Appearance	thick dark black ink
Viscosity #1	15 ÷ 20 Pa·s
Solid content	41 ± 2 %

Table 2. TYPICAL CURED PROPERTIES

Sheet resistivity	< 50 mΩ (/square/mil)
Adhesion	High
Bend resistance	Very Good
Thickness	8÷10 µm

#1 Viscosity test:

Brookfield DV-II+ Pro, 20rpm #14, 20±0.5°C

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STORAGE AND SHELF LIFE

Min. 6 months when properly stored in tightly closed containers at room temperature (5°-25°C). Some settling of solids may occur and ink should be thoroughly mixed prior to use.

SAFETY AND HANDLING

For safety and handling information pertaining C 800 EI, read the safety material data sheet (SDS).

DISCLAIMER

The data published in this document come from experiments carried out in our laboratories and performed in conditions believed to be the most commonly accepted by the industry. It is the end-user's responsibility to check whether this product can be efficiently used in his specific process and under his specific industrial conditions which Chimet SpA[®] can neither control nor foresee. Chimet makes no warranties expressed or implied arising from the product use. Chimet SpA[®] specifically disclaims any liability for consequential or incidental damages of any kinds, including lost profits.

This product is for professional use only. The users are supposed to be aware of health, safety and disposal procedures and recommendations. SDS can be downloaded from the Chimet SpA[®] website <http://sds.chimet.com/front/login>.