



TECHNICAL DATA SHEET

ELECTRA^WD'ORTM

ED3000 SERIES

SILVER CONDUCTIVE PASTES FOR USE ON
FLEXIBLE CIRCUIT BOARDS

PRODUCT DESCRIPTION

ED3000 Flexible silver pastes are thermoplastic conductive pastes developed specifically for use on untreated polyester, polyimide and polycarbonate films.

Typical screen-print applications are flexible circuits and membrane switches.

FEATURES & ADVANTAGES

- **High conductivity.** ED3000 resistance is only $30 \text{ m}\Omega \text{ U}^{-1}$
- **High resolution.** 250 μm tracks and spaces on typical thick film printers.
- **Excellent adhesion.** No peeling when tested as per cross hatch test IPC D-320.

ELECTRA D'ORTM ED3000 PRODUCT RANGE

ED3000 Surface resistance: **$30 \text{ m}\Omega \text{ U}^{-1}$** (12 μm cured thickness).

PROCESSING

Printing: Screen: 200 to 325 mesh stainless steel (62T to 77T polyester)
Stencil: 12 μm proud emulsion stencil.
Squeegee: 70 durometer.

Curing: Convection 30 to 40mins at 90 to 120°C.
Optimum adhesion and resistance will be attained by curing at 120°C

Viscosity: If viscosity adjustment (thinning) becomes necessary due to evaporation loss with prolonged usage, then **ethyl diglycol acetate** should be used up to a max of 5%.

www.electrapolymers.com

ED3000rev8

Page 1 of 3



Cleaning: Screens and other utensils may be cleaned using **butyrolactone**.

FINAL PROPERTIES

Test pattern: 1000 square serpentine pattern with a 12µm cured film on a 75µm mylar film substrate.

Adhesion: X-hatch and tape - 100% adhesion

Hardness: 2H

Humidity: 200 hours at 65°C/95%RH - <5% change in resistance.

Resistivity: After flex test (% resistance retained).

0-180°, one fold with crease	98%
0-360°, 1st and 2nd fold with crease	92%

Max. operating temp: 70°C



For further information, contact:

Electra
Roughway Mill
Dunk's Green
Tonbridge
Kent TN11 9SG
ENGLAND

Tel: +44 (0)1732 811 118
info@electrapolymers.com

Or visit our Website for details of local offices and Distributors

www.electrapolymers.com

The Laboratories at Electra Polymers & Chemicals Ltd. have taken all reasonable steps to ensure that the information set out above is accurate within the scope and limitations of our existing knowledge and experience. Since, however, we cannot anticipate or control the many interrelated conditions under which our products are used, all our products are offered for sale and trial on the basis that clients will satisfy themselves by tests or otherwise on these products, that they are fit, suitable and safe for the purpose for which they are required, within the parameters and conditions in which they will be used. In cases where our products are found to be defective in material and workmanship, our liability is limited to the purchase price of the products found to be defective. THIS WARRANTY IS TO THE EXCLUSION OF ALL OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, DESCRIPTION PRODUCTIVENESS OR ANY OTHER MATTER. None of the above information may be construed as a recommendation that our products be used in violation of any patent rights. We accept your orders at our shipping points only on the basis of the above understanding, set out in our detailed "Standard Terms + Conditions of sale". E & OE.