



# TECHNICAL DATA SHEET

## ***ELECTRA<sup>W</sup>D'OR<sup>TM</sup>***

### **ED8000 SERIES**

DIELECTRIC PASTES  
FOR RIGID AND FLEXIBLE CIRCUITS

#### **PRODUCT DESCRIPTION**

**ED8000** Dielectrics are a range of insulating pastes for use with Electrador conductors and resistors.

**ED8000 Dielectrics** are used in printed circuit cross-over applications where jumper printing is used to convert single-sided PCBs to double-sided or multilayer boards.

The **ED8000** range has products which are suitable for use on rigid, polyester, polyimide, polycarbonate or ABS substrates.

**ED8000** Dielectrics are available for thermal and UV cure.

#### **PRODUCT RANGE**

<b>ED8010</b>	<b>Thermal cure single-pack dielectric for rigid substrate</b>
<b>ED8020</b>	<b>UV cure single-pack dielectric for rigid substrate</b>
<b>ED8030</b>	<b>Thermal cure single-pack dielectric for <u>flexible</u> substrate</b>
<b>ED8040</b>	<b>UV cure single-pack dielectric for <u>flexible</u> substrate</b>

#### **PROCESSING**

It is recommended to overprint two layers of dielectric for good insulation over irregular surfaces. Two layers of dielectric will reduce the risk of poor insulation caused by printing pin-holes.

#### **ED8010 & ED8030 Thermal cure dielectrics**

**Printing:** Pastes should be printed using a 55 to 77T polyester mesh. For applications requiring fine print definition or tight resistance tolerances it is advantageous to use a 200 mesh stainless steel screen as this will reduce distortion.

**Curing:**

<b>ED8010 (rigid substrate)</b>	30 minutes at 150°C.
<b>ED8030 (flexible substrate)</b>	30 minutes at 80°C

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ED8000rev6



### **ED8020 & ED8040 UV cure dielectrics**

**Printing:** Pastes should be printed using a 100 to 120T polyester mesh.

**Cure:**

<b>ED8020 (rigid substrate)</b>	1500 to 2000 mJcm <sup>-2</sup>
<b>ED8040 (flexible substrate)</b>	1000 to 1500 mJcm <sup>-2</sup>

### **Effect of Dielectrics on resistance**

Dielectric pastes may cause an increase in resistance of the conductor paste. It is important to check the resistance of the conductor in conjunction with the dielectric.

### **CLEANING:**

All screens and utensils should be cleaned using SW100 or butyrolactone.

### **VISCOSITY:**

ED8000 is supplied ready for use. If viscosity reduction is required, thermal pastes are to be reduced with ER7 or butyrolactone and UV pastes with ERV3. No more than 5% reducer should be added otherwise print and cure properties may be impaired.

**SHELF-LIFE:** Minimum 6 months at room temperature. Refrigeration is not necessary.



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