PRODUCT DESCRIPTION

EL16 is a 2-component legend ink system for marking printed circuit boards. It is extremely fast curing and offers strong contrast, high definition and good chemical resistance.

FEATURES & ADVANTAGES

- Longer pot life. 2 component mixture remains usable for 48 hours.
- Increased screen stability. Less drying-up and, no staining of mesh.
- No colour change on soldering. White and yellow legends do not assume an off-colour tinge after soldering.

EL16 PRODUCT RANGE

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL16/1453W</td>
<td>White</td>
</tr>
<tr>
<td>EL16/1774Y</td>
<td>Yellow</td>
</tr>
<tr>
<td>EL16N</td>
<td>Black</td>
</tr>
<tr>
<td>H-1413</td>
<td>Hardener</td>
</tr>
</tbody>
</table>

PROCESSING

Mixing: EL16 is supplied pre-weighed for safe and easy mixing. If smaller quantities are required; EL16 should be mixed in the ratio 9:1, paste:hardener, by weight.

Important: Mix paste and hardener until homogenous. Incomplete mixing will lead to problems.

E.g. Poor adhesion to substrate
     Poor chemical resistance
     Patchy colour/finish.

Viscosity adjustment: Viscosity may be adjusted using Electrareducer ER1. No more than 5% reducer should be added or deterioration of printing or curing properties may occur.

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Printing:  
Mesh: 77 - 100T polyester  
Squeegee: 70 - 80 shore

Curing:  
**CONVECTION OVEN**  
10 to 20 min at 140 to 150°C  
**IR CURING**  
2 min at 160-180°C

**Important:**  
All times are time at board temperature  
Users should make their own tests when using IR curing owing to the variation between different machines, e.g. IR wavelength and IR intensity.  
Please contact Electra Technical service department for recommendations

**SHELF LIFE:**  
Minimum 12 months from date of manufacture when stored in cool dry conditions.

**CLEANING:**  
Screens and equipment should be cleaned using Universal Screenwash **SW100**.

**FINAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical properties</th>
<th>Electrical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pencil Hardness: 5-6H</td>
<td>Dielectric strength: 45kVmm⁻¹</td>
</tr>
</tbody>
</table>
| Solder resistance:  
  (SM840A III) >20s @ 260°C  
  (SM840A III) >30s @ 274°C  
Solvent resistance:  
  against CFCs & alcohols. (SM840A III)  
  No degradation  
Flux resistance:  
  (SM840A III)  
  No degradation |
| Dielectric loss factor: 0.02 @ 1MHz  |
| Surface resistivity: 10¹⁴ Ω            |
| Volume resistivity: 10¹⁶ Ω cm⁻¹         |
| Moisture & insulation resistance (IPC SM840A):  
  >10¹⁶ Ω             |
| Dielectric constant: 3.4 @ 1MHz          |

**Flammability:**  
E95722  
UL 94 V0
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

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