PRODUCT DESCRIPTION

This product is part of a range of Heat Curable Pastes designed specifically for use in Electro Luminescent systems. These products are based on a unique curing process that results in the low temperature formation of a thermosetting polymer. This paste has excellent adhesion, chemical and environmental resistance properties.

Product Benefits
Excellent adhesion to ITO, chemical and environmental resistance. This Phosphor has been designed to be used with Dielectric Paste D2070209P6 / D2090130D5 to produce a white light only. See page 2 for instructions on building a White Lamp.

PROCESSING
Pastes must be rolled for 4 - 6 hours prior to use (i.e. using a Rock 'n' Roll mixer or a Tumbler mixer) to ensure product is homogenous.

Stirring with metal implements could damage the product.

Screen Printing Equipment
Semi-Automatic, manual

Paste Screen Life
>3 hours

Screen Types
Up to 156 tpi polyester

Typical Curing Conditions
Belt Dryer 130°C for 3 minutes.
Box Oven 130°C for 10 minutes.

Clean Up Solvent
Ethoxy Propanol or Sericol

Substrate
ITO coated polyester.

Storage
The product should be kept sealed, in its container, and stored at room temperature (20°C)

Shelf Life
In a sealed container, stored correctly, the shelf life is minimum 6 months from despatch.

Diluent/ Thinner
Not recommended.

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Phosphor Colour</th>
<th>when used in conjunction with D2070209P6 / D2090130D5</th>
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</thead>
<tbody>
<tr>
<td>Blue/White</td>
<td>Small amount of black powder</td>
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</tbody>
</table>

Luminance (Phosphor powder 24Hrs/ cm²)
49.2

Solids Content at 150°C
77.5—81.5%

Viscosity
Haake RS1 C20/2º TiL at 230 sec⁻¹ at 25°C.
0.86—2.50 Pa s

Coverage
Using a 156 mesh polyester screen
120 cm² per g

PHYSICAL PROPERTIES PRINTED ON POLYESTER FILM

<table>
<thead>
<tr>
<th>Cured film thickness Printed on 175µ ITO coated Polyester</th>
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<tbody>
<tr>
<td>30 microns</td>
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</table>

SAFETY AND HANDLING

These pastes are intended for industrial use by trained personnel. It is important for workers to avoid overexposure to chemicals contained in these products.

Read the Material Safety Data Sheet (MSDS) and product labels before using the products.

Keep product container closed when not in use to prevent solvent evaporation and spilling hazard.

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INSTRUCTIONS FOR WHITE LIGHT LAMP

Our standard EL kit includes the Phosphor, Silver, Dielectric, Carbon and Insulation Paste.

Check ITO Film to find out which side is conductive.

It is recommended that the Conductive side of the ITO is cleaned with IPA to remove any dirt or grease from the surface. Allow the ITO to dry before printing.

The Blue/Green & Blue Phosphor Paste (C2080211P2) is printed directly onto the conductive side of the ITO. This then needs to be cured @ 130°C for 3 minutes using a belt dryer or alternatively in a box oven for 10 minutes @ 130°C.

On top of the cured Phosphor (C2080211P2) print a single layer of White Dielectric (D2070209P6). This is then cured @ 130°C for 3 minutes using a belt dryer or alternatively in a box oven for 10 minutes @ 130°C.

The next step is to print the Pink Dielectric (D2090130P5) on top of the white layer. This is then cured @ 130°C for 3 minutes using a belt dryer or alternatively in a box oven for 10 minutes @ 130°C.

The conductive layer (Silver or Carbon) is then printed on top of the Dielectric layers and cured in the same way as the Phosphor and Dielectric layers

It is recommended that the finished lamp be laminated using a self-adhesive heat sealed film or a suitable encapsulation paste. This will help to maintain the longevity of the lamp.