



**ELECTRA**

## TECHNICAL DATA SHEET

### ELECTRALUX ELX30

1-COMPONENT SILVER PASTE  
ELECTRO LUMINESCENT LAMP APPLICATIONS

#### PRODUCT DESCRIPTION

**ELX30** is a conductive silver based paste optimised for use in the construction of **electro luminescent (EL) lamps**.

It is formulated to give excellent adhesion performance with **indium tin oxide (ITO)**, **ELX10 Phosphor Pastes**, **ELX80 Dielectric Paste** and **ELX40 UV Curable Coverlay**.

#### Recommended lamp construction:

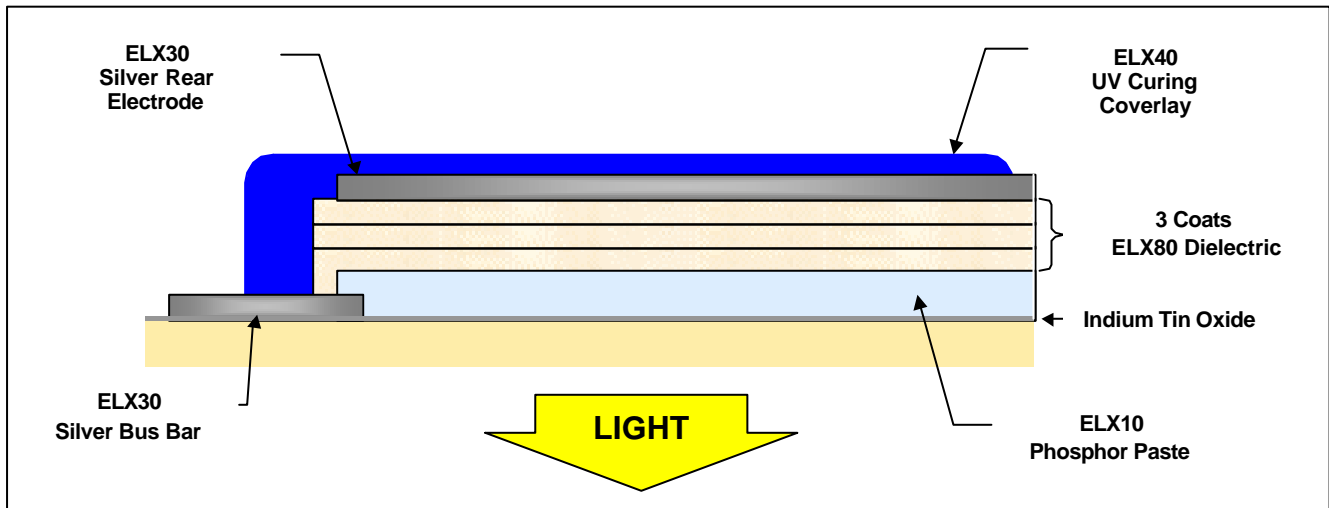


Figure 1 – Recommended EL lamp construction

#### PROCESSING

Typically a bus bar is printed around the edge of the lamp to ensure even current density on the ITO side of the capacitor this is due to the higher conductivity of the **ELX30 Silver Paste** compared to the ITO.

Alternatively the bus bar can be printed at the same time as the rear electrode providing there is sufficient clearance between the two conductors (min. 1mm or 0.04”).



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**Printing:** Mesh: 55 - 77T polyester

Finer mesh counts can be used but pinholes or voids will cause dull points on the finished lamp.

**Drying:** 2 to 10 minutes at 110-130°C for each layer  
Required time will depend on drying system (e.g. circulation and exhaust)

### **VISCOSITY ADJUSTMENT**

All ELX30 pastes are supplied ready to print however if lower viscosities are required ELX30 should be reduced using **ER17** Reducer. Care should be taken not to add too much reducer since this may adversely affect print properties.

### **SHELF LIFE:**

Minimum 12 months from date of manufacture, when stored in cool dry conditions.

### **CLEAN-UP:**

After printing, the screen and utensils should be cleaned of residual material using Universal Screenwash SW200.

### **STORAGE**

Store between 10°C – 25°C in a dry store. Avoid subjecting containers to temperatures below 5°C because of risk of splitting.

Dense components may settle during storage. It is recommended that materials are kept on roller or similar device when not in use.

### **FINAL PROPERTIES**

Flexibility:	3mm mandrel	PASS
Adhesion:	Tape-test	PASS (dielectric and ITO)
Hardness:	1H	

After the EL lamp has been printed and tested it can be encapsulated with **ELX40 Coverlay**, or heat-sealed in protective polyester or another suitable polymer and adhesive combination.



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