

## **TECHNICAL DATA SHEET**

# **ELECTRALUX** ELX50

1-COMPONENT CARBON PASTE ELECTRO LUMINESCENT LAMP APPLICATIONS

### **PRODUCT DESCRIPTION**

ELX50 is a conductive carbon based paste optimised for use as a rear electrode in the construction of electro luminescent (EL) lamps.

It is formulated to give a crack free layer with excellent adhesion performance with ELX80 Dielectric Paste and **ELX40 UV Curable Coverlay.** 

#### Recommended lamp construction:

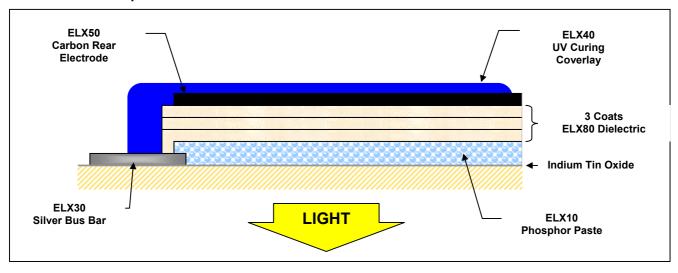
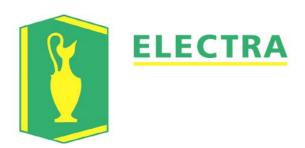


Figure 1 - Recommended EL lamp construction

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ELX50rev1



#### **PROCESSING**

**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 ELX50 pastes are supplied ready to print however if lower viscosities are required ELX50 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.

#### **FINAL PROPERTIES**

Flexibility: 3mm mandrel PASS

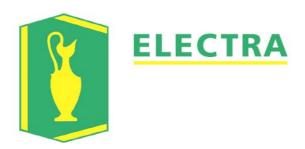
Adhesion: Tape-test PASS (dielectric)

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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ELX50rev1



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