



## ESL ELECTROSCIENCE

CERAMIC TAPES &  
THICK-FILM MATERIALS

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# POLYMER SILVER CONDUCTOR

# 1120

**Low Temperature Curing • RoHS Compliant\***

ESL 1120 is a silver-filled resin material designed for use as a conductor on low-temperature substrates. This silver conductor may be used on flexible substrates using roller applications.

## PASTE DATA

<b>Rheology:</b>	Thixotropic, screen-printable paste
<b>Viscosity:</b> (Brookfield RVT, 10 rpm, No. 4 spindle, 25.5 ± 0.5 °C)	4.5 ± 1 Pa.s
<b>Shelf Life:</b> (at 0 - 5 °C refrigeration recommended)	6 months

## PROCESSING

<b>Drying Time (at 125°C):</b>	1 - 2 min
<b>Curing Schedule:</b>	150°C / 30 min
<b>Substrate for Calibration:</b>	Mylar™
<b>Thinner:</b>	ESL 1120 Thinner

ESL Europe 1120 0902-D

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See Caution and Disclaimer on other side.

## TYPICAL PROPERTIES

<b>Cured Thickness:</b> (measured on a 100 mm x 10 mm conductor track)	35 ± 5 µm
<b>Approximate Coverage:</b> (at 35 µm cured thickness)	35 cm <sup>2</sup> /g
<b>Resistivity:</b> (measured on a 100 mm x 10 mm conductor track)	<20 mΩ/□
<b>Resistance to Acetone:</b>	Good
<b>Flexibility:</b> (to BS EN ISO 1519:1995)	Good, no cracking with 4mm cylindrical mandrel
<b>Adhesion:</b> (to DIN 53151)	Grade 0

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\*None of the six substances referred to in the RoHS Directive (2002/95/EC) are used in the formulation of this product.

**CAUTION:** Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapours emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

**DISCLAIMER:** The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. ElectroScience assumes no liability for any injury, loss, or damage, direct or consequential, arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular use, before using it. User assumes all risk and liability whatsoever in connection with his intended use. ElectroScience's only obligation shall be to replace such quantity of the product proved defective.

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