



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CERMET SILVER CONDUCTOR

9907

RoHS Compliant* Conductor for use with Fuel Cells

ESL 9907 is a silver conductor designed to be used as a current collector for solid oxide fuel cells (SOFC). It can be screen-printed and is also available in syringes for dispensing.

PASTE DATA

Rheology:	Thixotropic screen-printable paste
Viscosity: (Brookfield RVT, 10rpm, ABZ Spindle, 25.5 ± 0.5 °C)	75 ± 25 Pa.s
Bonding Mechanism:	Fritless
Colour:	Grey
Shelf Life (20 - 25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:	325 S/S, 15 - 25 µm
Levelling Time (at 20 °C):	5 - 10 min
Drying Time (at 125 °C):	10 - 15 min
Firing Temperature:	Optimum: 850 °C Time at peak: 10 - 12 min
Total Firing Cycle:	45 - 60 min
Substrate for Calibration:	ESL 41010
Thinner:	ESL 401

ESL Europe (KOP) 9907 0912-A

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See Caution and Disclaimer on page 2.

TYPICAL PROPERTIES

Fired Thickness: 9 - 17 μm

Resistivity:
(when normalized @ 20 μm & co-fired with ESL 41010 tape) < 2 m Ω /sq.

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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.

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