



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

416 EAST CHURCH ROAD
KING OF PRUSSIA, PA 19406-2625, U.S.A

T: 610-272-8000
F: 610-272-6759

www.electroscience.com

SOLAR CELL SILVER ALUMINIUM PASTE 9925-G

RoHS Compliant* Photovoltaic Material

ESL 9925-G is a silver paste designed for the back-surface metallization of single crystal and polycrystalline silicon solar cells. The 9925-G is an aluminium-doped silver paste that contains a cadmium-free, lead-free glass developed to promote a balance between ohmic contact, solderability, and adhesion.

The recommended materials to be used in conjunction with 9925-G are 9980 Series front-surface silver and 2590 Series back-surface aluminium metallisations.

PASTE DATA

Rheology: Thixotropic screen-printable paste

Viscosity:
(Brookfield RVT, 10rpm,
ABZ Spindle, 25.5 ± 0.5 °C) 100 ± 40 Pa.s

Shelf Life (20 - 25 °C): 6 months

PROCESSING

Screen Mesh, Emulsion: 180 - 325 S/S, 25 µm

Levelling Time (at 20 °C): 5 - 10 min

Drying Time (at 125 °C): 10 - 15 min

Furnace Set Point: 840 - 910 °C
Time above 600 °C: typically 5 - 8 sec

Thinner: ESL 401 or 413

Note: When used with the ESL 2590 Series materials, 9925-G should be printed first. The aluminium paste should be printed second so that it overlaps the silver but leaves an exposed silver pad. The materials can then be co-fired to provide a solderable contact pad.

ESL Europe (KOP) 9925-G 0912-A

ESL Affiliates

ESL Europe (Agmet Ltd) • 8 Commercial Road • Reading • Berkshire • England • RG2 0QZ • Tel: +44 (0) 118 918 2400 • Fax: +44 (0) 118 986 7331 • Sales@ESLEurope.co.uk

ESL Nippon • Sukegawa Bldg. • 6th floor • 3-4 Yanagibashi 1-chome • Taito-ku • Tokyo 111, Japan • Tel: +81-3-3864-8521 • Fax: +81-3-3864-9270 • Sales@ESL-Nippon.co.jp

ESL China • Room #1707, Tower A, City Center of Shanghai • 100 Zunyi Road • Shanghai, China 200051 • Tel: +86-21-6237-0336 and 0337 • Fax: +86-21-6237-0338
ESLChina@eslshanghai.net

Blank page

ESL Europe (KOP) 9925-G 0912-A

*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.
