



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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OVERGLAZE COMPOSITION

G481 G482

Cadmium-Free

ESL G-481 and G-482 are low-temperature firing, semi-glossy, acid resistant, screen-printable overglazes. They are specially formulated for use with the ESL R-300-A/B Resistor Series. Due to their acid-resistant properties, they are particularly well suited for use with chip resistors. The G-481 is green in colour and is used for the first coating over the resistor prior to laser trim. The G-482 is designed for use as the final glass coating. Both may be used where resistance to acid plating baths is desired. Both materials are cadmium-free.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste	
Viscosity: (Brookfield RVT, 10 rpm, ABZ spindle, 25.5 ± 0.5 °C)		225 ± 50 Pa.s
Colour:	G481:	Green
	G482:	Black
Shelf Life (20 - 25 °C):		6 months

PROCESSING

Screen Mesh, Emulsion:	325 S/S, 25 µm
Levelling Time (at 20°C):	5 - 10 min
Drying Time (at 125°C):	10 - 15 min
Firing Temperature Range:	600 - 625°C
	Time at peak: 10 min
Total Firing Cycle:	30 min
Substrate for Calibration:	96% alumina
Thinner:	ESL 401

ESL Europe G481, G482 0209-B

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Fired Thickness:

7 - 13 μm

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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.
