ESL ELECTROSCIENCE
CERAMIC TAPES & THICK-FILM MATERIALS
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INSULATING COMPOSITION 4925-A

HOS Heaters on Steel® • COS Circuits on Steel® • TFOS Thick Film on Steel®

RoHS Compliant*

ESL 4925-A is a dielectric composition designed for use as a buffer layer between 4924 and ESL resistor materials. These materials are also useful in other TFOS Thick Film on Steel® applications.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT, 10 rpm, ABZ spindle, 25.5 ± 0.5 °C)	220 ± 50 Pa•s
Color:	Dark blue
Shelf Life (25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:	Small area	200 / 37 ± 5 µm
	Large area	165 / 0 µm
Levelling Time (at 20°C):		5 - 10 min.
Drying Time (at 125°C): (Depending on substrate volume)		> 15 min.
Firing Temperature Range:		850 - 930°C
	Optimum:	850 °C
	Time at peak:	10 - 12 min.
Rate of Ascent/Descent:		50°C – 60°C/min.
Substrate for Calibration:		Type 430 stainless steel
Thinner:		ESL 401

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Fired Thickness:	> 80 µm
Breakdown Voltage:	> 1,000 VAC
Approximate Coverage: (at 40 µm fired thickness)	80 cm^2/g
Insulation Resistance: (at 25°C, 100 VDC)	≥ 10^9 Ω
Dielectric Constant (K):	11 - 14
Dissipation Factor:	≤ 0.5%

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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.**