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CERMET CONDUCTOR

9595-A

ESL 9595-A is a silver platinum conductor that exhibits excellent adhesion, solderability, and oxidation resistance. This conductor can be used on glass or porcelain enameled steel. It is compatible with other ESL products suitable for use on the same substrates.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	230-290 Pa·s
BONDING MECHANISM:	Mixed-bonded
SHELF LIFE: (25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	325 / 25 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING RANGE:	600°C-930°C
OPTIMUM: (for PES/glass)	625°C
OPTIMUM: (for alumina)	930°C
TIME AT PEAK:	10-12 minutes
RATE OF ASCENT/DESCENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	alumina
THINNER:	ESL 401

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ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:	10-15 μm
RESISTIVITY:	$\leq 10 \text{ m}\Omega/\text{square}$
PRINTING RESOLUTION: (Line/Space)	125 μm x 125 μm
SOLDER WETTABILITY: (RMA flux, 5 sec. dip)	
62 Sn/36 Pb/2 Ag, (220°C \pm 5°C)	Good
95 Sn/5 Ag, (260°C \pm 5°C)	Good
SOLDER LEACH: (No. of 10 sec. dips to double resistance of 0.25 mm wide x 100 mm long conductor, alumina substrate)	≥ 2
ADHESION: (90° pull, 2.0 mm x 2.0 mm pads, alumina substrate, 62 Sn/36 Pb/2 Ag)	
Initial pull strength:	$\geq 45 \text{ N}$
Aged 48 hours at 150°C:	$\geq 25 \text{ N}$

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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 vapors 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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