TUNGSTEN CONDUCTOR

ESL 2170-B is a screen-printable Tungsten paste designed for use on refractory ceramic green tapes for use as a via fill. Firing temperatures range from 1500°C to 1650°C in either wet cracked ammonia atmospheres or wet hydrogen atmospheres. ESL 2170-B exhibits excellent printability and is recommended for screen printing using either a 200 mesh or 325 mesh stainless steel screen with 12.5 to 25 micrometers emulsion thickness. ESL 2170-B contains a substantial amount of glass/ceramic binders.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste
SOLIDS: 85%-90%
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C) 200±25 Pa-s
SHELF LIFE: (at 20°C) 6 months

PROCESSING

SCREEN MESH/EMULSION: 200-325 mesh / 12.5-25.0 µm
LEVELING TIME: (25°C): 5-10 minutes
DRYING AT 125°C: 10-15 minutes
FIRING ATMOSPHERE: Wet hydrogen or wet cracked ammonia
FIRING TEMPERATURE RANGE: 1500°C-1650°C
SUBSTRATE OF CALIBRATION: Green tape
THINNER: ESL 413
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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