OVERGLAZE COMPOSITION

4702

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

Overglaze Designed to Protect HOS Heaters on Steel™

ESL 4702 overglaze composition is designed to protect heaters printed onto ESL 4924 insulated stainless steel substrates and is also useful on other TFOS (Thick Film on Steel™) applications. The 4702 is non-porous and its TCE closely matches that of ESL 4924. The 4702 will not adhere directly to stainless steel; so, it must be printed onto areas of the steel that have been coated with 4924. The shift in resistance value of ESL 29XXX resistors after overglazing with 4702 is < 5%.

PASTE DATA

RHEOLOGY: \[\text{Thixotropic, screen printable paste}\]

VISOSITY: \(250\pm25 \text{ Pa}\cdot\text{s}\)

COLOR: \(\text{Green / Semi-glossy}\)

SHELF LIFE: \(6 \text{ months}\)

PROCESSING

SCREEN MESH/EMULSION: \(325/10 \mu\text{m}\)

LEVELING TIME: \(5-10 \text{ minutes}\)

DRYING AT 125°C: \(> 15 \text{ minutes}\)

FIRING TEMPERATURE RANGE: \(850°C-930°C\)

OPTIMUM: \(850°C\)

TIME AT PEAK: \(10 \text{ minutes}\)

RATE OF ASCENT/DESCENT: \(50°C-60°C/\text{minute}\)

THINNER: \(\text{ESL 401}\)

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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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