DIELECTRIC COMPOSITION

RoHS Compliant* Sealing Glass

ESL 4031-B glass paste is designed for low temperature sealing of ceramic (alumina) substrates. When properly fired, ESL 4031-B produces transparent seals that can be used in a variety of packaging and hermetic sealing applications.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOSITY:
(Brookfield RVT, ABZ spindle, 10 RPM, 25°C – 26°C) 225±50Pa•s

COLOR: Blue

SHELF LIFE: (5°C) 6 months

PROCESSING

SCREEN MESH/EMULSION: 200/18-38 µm

LEVELING TIME: (25°C) 5-10 minutes

DRYING AT 125°C: 10-15 minutes

FIRING TEMPERATURE:

BURN OFF CYCLE: (30 minutes at peak temperature) 25°C to 375-400°C Rate - 40°C/minute

SINTERING CYCLE: (30 minutes at peak temperature) 400°C to 450-550°C Rate - 40°C/minute

SEALING CYCLE: (30 minutes at peak temperature) 25°C to 530-580°C Rate - 20°C/minute

SUBSTRATE OF CALIBRATION: 96% alumina

THINNER: ESL401

FIRED THICKNESS: 30-40 µm
**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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