DIELECTRIC COMPOSITION 4604-A, 4605

RoHS Compliant *

Dielectric Compositions for Aluminium

ESL 4604-A and 4605 dielectric pastes are designed to be used together to insulate type 3003 or 3103 aluminium. These materials should be used to provide the best voltage breakdown properties and insulation resistance. The total dielectric fired thickness must exceed 65 micrometers. Offsetting the 4604-A from the 4605 on all sides is suggested.

PASTE DATA

Rheology: Thixotropic, screen-printable paste

Viscosity:
- (Brookfield RVT, 10 rpm, ABZ spindle, 25.5 ± 0.5 °C)
  - 4604-A: 80 ± 50 Pa.s
  - 4605: 150 ± 25 Pa.s

Colour:
- 4604-A: Light tan
- 4605: Light green

Shelf Life (20 - 25 °C): 6 months

PROCESSING

Screen Mesh, Emulsion: 145 - 165, 0 - 5µm

Levelling Time (at 20 °C): 5 - 10 min

Drying Time (at 125 °C): 10 - 15 min

Firing Temperature Range:
- 580 °C
- Time at peak: 10 min

Total Firing Cycle: 50 - 60 minutes

Substrate for Calibration: 3 mm thick, type 3003 or 3103 aluminium

Thinner: ESL 401

Compatible Materials:
- ESL 9912-K, 903-A, 2312-A3
- (599-E fired at 450 °C)
None of the six substances referred to in the RoHS Directive (2002/95/EC) are used in the formulation of this product.

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 vapours 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.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use thereof, or that any such use will not infringe any patent. ElectroScience assumes no liability for any injury, loss, or damage, direct or consequential, arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular use, before using it. User assumes all risk and liability whatsoever in connection with his intended use. ElectroScience’s only obligation shall be to replace such quantity of the product proved defective.