Co-fireable Solder Mask for HL2000

**Description**

TO2002 is a screen printable dielectric that can be cofired with HL2000 to act as a solder mask.

TO2002 has excellent adhesion to HL2000 and is impervious to most solvents, moisture and soldering.

**Key Benefits**

- Solder mask for HL2000 tape
- Impervious to most solvents, moisture and solder

**Typical Properties**

- **Viscosity:** 35 – 45 Kcps, Brookfield HBT viscometer, SC4-14 spindle with 6R utility cup at 10rpm, 25 °C
- **Insulation Resistance:** > 10¹¹ Ω at 100 V DC
- **Breakdown Voltage:** > 1,000 V DC per mil
- **Solids:** 75.0 % ± 2 %
- **Colour:** Blue

**Recommended Processing Guidelines**

**Printing:**

- 200 – 325 mesh stainless steel screen
- 0.5 – 1.0 mil emulsion

Allow wet prints to level at room temperature for 5 – 10 minutes before drying

**Drying:**

- 150 °C for 10 – 20 minutes

**Burnout and Firing:**

- Co-fire with HL2000

Burnout and firing profile in a box oven.
- Ramp at 3 °C/min to 100 °C for start of burnout
- Burnout: ramp at 2 °C/min to 450°C (typically no holds are required during burnout)
- Ramp at 8.0 to 10 °C/min to 865 °C
- Firing peak: 865 °C for 20 to 30 minutes
- Cool at 10 °C/min to room temperature

**Thickness:**

- Wet: 38 – 42 µm
- Fired: 18 – 22 µm

**Thinner:**

Heraeus RV-507

**Warranty:**

Material guaranteed to meet specifications for 6 months from date of shipment.

**Storage:**

- Store in a dry location at 5 – 25 °C
- **DO NOT REFRIGERATE**

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.