THICK FILM MATERIALS

Product Type: Polymer Thick Film
Product Name: UVD5802

Description
UVD5802 is a screen printable UV dielectric ink for low cure applications. This UV dielectric ink, when properly cured, has good adhesion to most untreated and treated flexible plastic films such as polyester. UVD5802 can be used for insulation of silver traces and a dielectric for cross-overs in membrane keyboard applications.

Key Benefits
- REACH¹ and RoHS² compliant
- Fast UV curing
- Good adhesion to untreated and treated flexible plastic films
- Compatible with Heraeus Ag conductors

Recommended Processing Guidelines

| Printing: | 325 stainless steel mesh screen 0.5 mil emulsion |
| Curing: | 550 mJ UVA source |
| Thickness: | 25 microns (Total 2 cured layers) |
| Thinner: | LC-3668 |
| Warranty: | Material guaranteed to meet specifications for 6 months from date of shipment |

Handling & Precautions:
Use in a well-ventilated area. Avoid contact with skin. Wash with soap and water.

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.

SPECIAL NOTE:
Some of these materials may show resistance shifts due to thermal storage. Stability baking has been shown to minimize this behavior.

Typical Properties

**Dielectric constant:**
4 at 1 kHz

**Dielectric Breakdown Voltage:**
> 1000 Volts/mil  
(2 printed layers)

**Insulation Resistance:**
> 50 x 10⁹ Ω  
at 25 microns cured (2 printed layers)

**Non-Volatile: (1 Hr @ 150 °C)**
100 %

**Viscosity:**
10 – 20 Kcps; Brookfield RVT  
SC4-14 spindle and 6R utility cup @ 10 rpm, 25 °C

**Color:**
Clear
Legend:

1) REACH compliant according to the latest **
Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest **
Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)