

## Technical Data Sheet



### THICK FILM MATERIALS

**Product Type:** Polymer Thick Film

**Product Name:** UVD5803

#### Green UV Curable Dielectric

##### Description

UVD5803 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. UVD5803 can be used for insulation of silver traces and a dielectric for cross-overs in membrane keyboard applications.

##### Key Benefits

- Fast UV curing
- Good adhesion to untreated and treated flexible plastic films
- Compatible with Heraeus Ag conductor (LTC3602)

##### Recommended Processing Guidelines

**Printing:**

280 – 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

**Storage:**

Store in a dry location at 5°C – 25 °C.  
Avoid Direct Sunlight

**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.

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#### Typical Properties

**Dielectric constant:**

4 at 1 kHz

**Dielectric Breakdown Voltage:**

> 1,500 Volts/mil  
(2 printed layers)

**Insulation Resistance:**

>  $50 \times 10^9 \Omega$   
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:**

Translucent green

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