

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

- REACH¹ and RoHS² compliant
- Fast UV curing
- Good adhesion to untreated and treated flexible plastic films
- Compatible with Heraeus Ag conductor (LTC3602)

Typical Properties

Dielectric constant:

4 at 1 kHz

Dielectric Breakdown Voltage:

> 1,500 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:

Translucent green

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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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)

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