

## Product Description

Dycotec DM-IN-7010S is a ~100% solid UV curable paste for screen printing for general electronic application use. No drying is required prior to ultraviolet (UV) curing. The paste is designed to be rapidly cured using UV-LED systems. The high abrasion resistance provides excellent adhesion on various surfaces.

## Product Benefits

- Formulated for screen printing
- UV-LED curable
- High abrasion resistance
- Good flexibility
- Excellent adhesion

## Paste Preparation

DM-IN-7010S is a single part paste system. The material should be used in an environment that provides UV protection. Once the paste has been removed from the container for printing, this may introduce contamination. Please do not replace the paste in the container.

## Properties of the Uncured Paste

Test	Properties
Viscosity after mixing (Pa.s) (Lamy, cone and plate 50s <sup>-1</sup> , 20°C)	2 - 3
Colour	Off-white, light grey
Density	1.74 g/cm <sup>3</sup>
Solids Content	100%

## Paste Processing Conditions

Parameter	Typical Properties
Substrate	Glass, ITO-Glass, Plastics, FR4
Coverage	200 cm <sup>2</sup> /g
Screen	325 SS
Flood speed	30 mm/s
Print speed	45 mm/s
Squeegee type	60 durometer (clear)
Squeegee pressure	3 Kg
Squeegee holding angle	45°
Print Gap	0.7 mm

These parameters will typically achieve a print thickness of 25-30 µm after cure.

## Paste Curing Conditions

Test	Properties
UV-LED Wavelength	380 - 390 nm
UV Curing Energy	500 - 1000 mJ/cm <sup>2</sup>

## Properties of the Cured Ink

Test	Properties
Pencil hardness scale	5H
Adhesion	5B
Dielectric Strength	>3 kV/mm
Volume Resistance	>1 x 10 <sup>15</sup> Ω.cm
Surface Resistivity	>1 x 10 <sup>13</sup> Ω/□

## Storage and Shelf-life

Store at room temperature (10-25°C) with lids tightly sealed. The paste shelf-life for an unopened container is 3 months from date of shipment.

Containers should be stored as specified with lids tightly sealed. We cannot assume responsibility for an ink that has not been stored in appropriate conditions or where the ink has been contaminated following use. Equipment can be cleaned using alcohols such as propanol.

## Safety and Handling

For safe use of this product, please review relevant material safety and datasheet (MSDS).

For more information, please contact:

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

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