

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 ⁻¹ , 20°C)	2 - 3
Colour	Off-white, light grey
Density	1.74 g/cm ³
Solids Content	100%

Paste Processing Conditions

Parameter	Typical Properties
Substrate	Glass, ITO-Glass, Plastics, FR4
Coverage	200 cm ² /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 ²

Properties of the Cured Ink

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

Dycotec Materials Ltd
Unit 12, Star West
Westmead, Westlea
Swindon, Wiltshire
SN5 7SW UK
Email: info@dycotecmaterials.com
Tel: +44 (0)1793 422598
www.dycotecmaterials.com

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.

Note: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Dycotec Materials specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale of use of Dycotec Material's products. Dycotec Materials specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Dycotec Material patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one of or more UK or foreign patents or patent applications.