

## Product Description

Dycotec DM-SIP-3002S is screen printable silver paste that is designed for rugged application use. The silver paste system is designed to withstand acid dipping processes. The paste is used in applications such as display, sensors and general printed electronics.

## Product Benefits

- Good printability
- High abrasion resistance
- Good screen residence time
- Acid and solvent resistance
- Excellent adhesion

## Paste Preparation

DM-SIP-3002S is a single part paste system. The material should be used within 6 hours of removing the paste from its container. After 6 hours, quality cannot be guaranteed. 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 Uncured Paste

Test	Properties
Viscosity after mixing (Pa.s) (Cone and plate 50s <sup>-1</sup> , 20°C)	10-30
Thinner	For slight adjustments in viscosity, use DM-SIP-3002-DT
Coverage	170 cm <sup>2</sup> /g
Solids content	60-70%

## Paste Processing Conditions

Parameter	Typical Properties
Substrate	Glass/ITO-Glass
Screen	325 SS, 13 µm emulsion
Flood speed	50 mm/s
Print speed	50 mm/s
Squeegee type	80 durometer (Red)
Squeegee pressure	2.5 Kg
Squeegee holding angle	60°

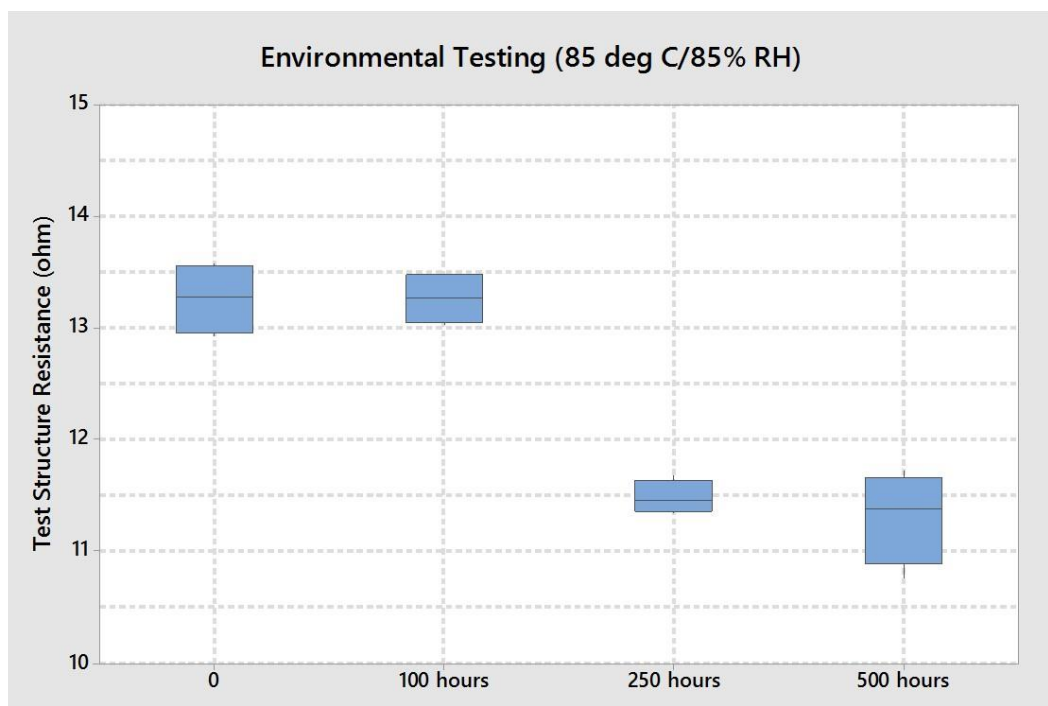
Printed structures should be dried at 200°C for 15 mins in an oven or at 230°C for 8 mins in an IR drier.

## Properties of Cured Paste

Test	Typical Properties
Thickness	~5-6 µm
Sheet resistance	<18 mΩ/□/mil
Surface roughness (Ra)	<1 µm
Adhesion	5B
Hardness	7H
Resolution (L/S)	250 µm

The material will withstand washing in <15% nitric acid for 60s without change in adhesion or resistance.

## Reliability Data



## Clean-Up

Equipment can be cleaned using alcohols such as propanol.

## Storage and shelf-life

Containers should be stored in a fridge (4°C) with lids tightly sealed. The paste shelf-life for an unopened container is 6 months from date of shipment. Please ensure the material has time to reach room temperature before use. Avoid introduction of water into the paste. Dycotec Materials cannot assume responsibility for a paste that has not been stored in appropriate conditions or where the pastes have been contaminated following use.

## 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. More detailed information can be obtained via [info@dycotecmaterials.com](mailto:info@dycotecmaterials.com).

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