

Product Description

Dycotec DM-SIP-3064S is a flat-bed and rotary screen printable silver paste that is used for OPV thin film PV electrodes and general printed electronics applications. It is designed for specifically for compatability with OPV.

Product Benefits

- Fast drying
- Excellent adhesion
- Good electrical conductivity

Paste Preparation

DM-SIP-3064S is a single part paste system. The paste should be gently stirred before use avoiding incorporation of air bubbles. 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 & plate, 50s ⁻¹ , 20°C)	3-8
Screen residence time	This paste is designed predominantly for high volume use. Pastes should be used rapidly <30 mins for flat bed screen printing to prevent poor printing by excessive solvent loss
Thinner	For slight adjustments in viscosity use DM-SIP-3064-DT
Coverage	145 cm ² /g at 10 μm cured print thickness
Solids Content	72-78 %

Paste Processing Conditions

Parameter	Typical Properties
Substrate	PET, ITO-PET
Drying Temperature	120-140°C
Drying Time	5 mins
Drying method	Convection oven or IR heating
Screen	325 thread per inch, stainless steel, 13 μm emulsion
Squeegee	80A Shore red
Print speed	30-80 mm/s

Properties of Cured Paste

Test	Typical Properties
Sheet Resistance	<19 mΩ/□/mil
Volume Resistivity	<48 μΩ.cm
Adhesion	5B
Resolution (L/S)	250/250 μm

Clean-Up

Equipment can be cleaned using propylene glycol methyl ether acetate.

Storage and shelf-life

Containers can be stored at room temperature (10-25°C) for 6 months, for extended shelf life, the 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. If stored at 4°C, 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 and safety 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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