

Product Description

DM-OC-6100S is a thermal curable solid state electrolyte (KCl) paste for the construction of screen printed reference electrodes for biosensor use. Multiple layers can be printed to increase KCl concentration.

Product Benefits

- Compatible with overprinting of Dycotec's silver chloride - silver electrodes
- Excellent biosensor stability/lifetime

Paste Preparation

Before use, the paste should be thoroughly but gently stirred with a spatula to avoid incorporation of air bubbles.

Properties of the Uncured Paste

Test	Properties
Viscosity after mixing (Pa.s) (Malvern Kinexus Ultra, 50s ⁻¹ , 21°C ± 0.5°C)	10 - 15 (use DM-OC-6100S-DT for small adjustments in viscosity)
Solids Loading	100%
Colour	White

Paste Processing Conditions

Parameter	Typical Properties
Substrate	PET and over printed on AgCl:Ag reference electrode
Screen	SEFAR-PET-1500 54/137-70 PW, 5 µm emulsion
Flood speed	70 mm/s
Print speed	70 mm/s
Squeegee type	80 Shore A
Squeegee pressure	8 Kg (over 22 cm squeegee length)
Print Gap	1.2 mm
Print Method	Print/flood
Screen residence time	>2 hours

It is recommended to apply 2 printed layers.

Paste Curing Conditions

Test	Properties
Cure Temperature	130°C
Cure Time	10 - 15 mins

Clean-Up

Equipment can be cleaned using DGMEA (Diethylene Glycol Monoethyl Ether Acetate) and then wipe dry with isopropanol.

Storage and Shelf-life

Store at room temperature <25°C with lids tightly sealed. The paste shelf-life for an unopened container is 6 months from date of shipment. Dycotec cannot assume responsibility for an ink that has not been stored in appropriate conditions or where the ink has 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.

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