

## Product Description

Dycotec DM-OCI-6002 is a 100% solid UV curable ink for ink-jet printing for general electronic application use. No drying is needed prior to ultraviolet (UV) curing. The ink is designed to be rapidly cured using UV-LED systems. DM-OCI-6002 also contains functional material to ensure excellent hardness and improve its barrier performance to water transmission. The high abrasion resistance provides an effective overcoat layer with excellent adhesion on various substrates.

## Product Benefits

- Formulated for ink-jet printing
- UV-LED curable
- High Abrasion Resistance
- High transparency
- Excellent adhesion

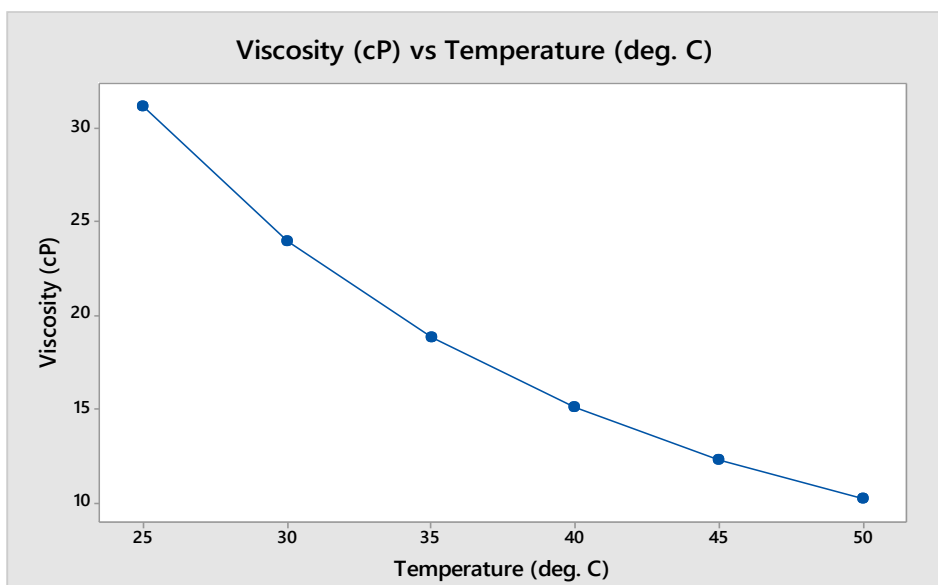
## Ink Preparation

The ink is packaged to avoid all sources of UV light, sunlight, and fluorescent lights. Thoroughly swirl (not shake) the ink before use to ensure the product is well mixed and to avoid introducing air bubbles. Do not replace used ink in the container. This ink is designed for drop-on-demand print-heads.

## Properties of the Uncured Ink

Test	Properties
Viscosity (500 s <sup>-1</sup> cone & plate, Kinexus Ultra+)	12 cP at 45°C
Surface Tension	31 mN/m
Solids Loading	~100%
Substrate compatibility	Glass, plastics, FR4
Density	1.15 g/cm <sup>3</sup> at 20°C

## Reliability Data



## Ink Curing Conditions

Test	Properties
UV-LED Wavelength	380 nm – 390 nm or Lambda MAX (nm): 230, 275, 370
UV Curing Energy	500-1000 mJ/cm <sup>2</sup>

## Properties of the Cured Ink

Test	Properties
Pencil hardness scale	7H
Adhesion	5B
Lap Shear Strength (between 2 PET sheets)	>260 N/cm <sup>2</sup> (when used as an adhesive)
Transmittance	>99% at 550 nm
Haze	<0.05%
Dielectric Strength	>10 kV/mm
Surface Resistivity	>1 x 10 <sup>14</sup> Ω.cm
Volume Resistivity	>1 x 10 <sup>14</sup> Ω/□

## Storage and shelf-life

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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