

# **Technical Information**

**UV** varnish

## **UV TIO OP Varnish**

**UV TIO OP Varnish** is a series of UV OP varnish which suitable for Offset Printing, Letterpress Printing and Dry Offset Printing system. Gloss type and Matte type are available.

#### Features

- Excellent curing property. Compatible with such as energy-saving UV systems, LE-UV, Ozone-less UV and LED-UV system
- Yellowing of varnish when cured is little
- Regarding gloss type, it can achieve high glossiness
- Regarding matte type, it can achieve high matte effect
- Excellent over-emulsification resistance and has good offset printing property
- Comply with EuPIA Exclusion Policy for Printing Inks and Related Products
- Conform to chemical regulations such as RoHS, SVHC of REACH etc.

#### General properties

	Tack	Flow	Sliding Angle
Gloss OP Varnish	4.0	36	Around 25
Matte OP Varnish	4.0	32	Around 20

<sup>\*</sup>Tack: Ink-O-Meter (Water temperature 38°C, 400rpm, 1 minute value)

### Handling Instruction

- Please use additives, washing agent and plate material that are designed for UV OP varnish.
- Due to the products have high curing property, when stay open for long time, the varnish in the ink duct may react to UV ray from fluorescent light and cure. In case the varnish in the ink duct has skinning, please consider using fluorescent light with UV cut property, or light shielding of ink duct.
- In case the volume of varnish is too much, or if the lamp is deteriorated, it may become a cause for inferior curing. Please pay attention to this matter.
- These products cannot be used as UV OP varnish to be printed on offset conventional (oil based) ink.
- Please be careful not to apply too much mat OP varnish. Higher mat effect can be achieved when varnish amount is smaller. Also, higher effect can be achieved when underneath ink is cured.
- "Sliding Angle" mentioned above should only be used as guide, as it will change according to different environment such as paper quality, curing condition, humidity, etc.

<sup>\*</sup>Flow: Spread-O-Meter (Room temperature 25°C, spread diameter [mm] after minute)

<sup>\*</sup>Sliding angle will change according to different drying conditions, substrate, underneath ink, etc.

- When handling, please beware of fire, keep the work area well ventilated and avoid UV rays/direct sunlight. Please wear suitable protective equipment to prevent inhalation or contacting with eyes, skin, or clothes. When you get an ink stain on the clothes, please wash out the clothes immediately and changing the clothes to avoid contact with dirt for a long time. After handling, please wash your hands and gargle well.
- In case the varnish contact with eyes, please rinse it immediately with plenty of water for at least 15 minutes and seek medical attention from an ophthalmologist. In case the varnish contact with skin, please wash out the clothes/shoes, wash the contacted part with soapy water and then rinse with plenty of water. If you have skin irritation or itching, please seek medical attention, and get medical care.
- Read SDS carefully before using **UV TIO OP Varnish**.