

# Series 640-ULXX/05

## UV Luminescent Ink

In general, luminescence is the phenomenon in which luminescent material absorbs a form of energy and emits it as electromagnetic radiation. This emitted electromagnetic radiation is mostly in the visible colour spectrum of light and appears to us as a "cold glow".

UV luminescence describes the glowing of materials by exposure to wavelengths of a different frequency than daylight (mainly ultraviolet or so-called black light, 365 nm). In concrete terms, colourless coloured layers are present that show a clear colour change when irradiated with UV-A light (specifically 365 nm).

Series 640-ULXX/05 is a highly opaque and glossy screen printing ink for printing on plastics and metals. The luminescent ink range of Series 640 consists of the following products:

Series 640-UL09/05:	UV luminescent ink, yellow
Series 640-UL16/05:	UV luminescent ink, red
Series 640-UL26/05:	UV luminescent ink, blue
Series 640-UL30/05:	UV luminescent ink, green

## Specifications

<b>Thinner</b>	Series 600-017
<b>Addition ratio</b>	10 – 20 % by weight
<b>Retarder</b>	Series 600-018
<b>Addition ratio</b>	5 – 15 % by weight
<b>Hardener</b>	Series 600-HDA
<b>Addition ratio</b>	25 %
<b>Cleaner</b>	Series 600-URS
<b>Mesh</b>	120.34 recommended, 150.31–77.55 possible
<b>Drying</b>	5–7 days at room temperature, oven drying possible (e.g. 140 °C/20 mins)
<b>Substrates</b>	ABS, SAN, coated surfaces / powder coatings, PA (pre-treated), Polyester (primered), PE (pre-treated), PP (pre-treated), Tritan™ (copolyester), composite materials, metals, Polyester (non pre-treated)
<b>Indoor / outdoor use</b>	Indoor
<b>Further processing</b>	Embossing, punching, bending, cutting (after preliminary tests)
<b>Overprintability</b>	With suitable ink systems, the ink film can be overprinted, preferably before the ink has fully cured.
<b>Available quantities</b>	1 kg, 5 kg, 25 kg
<b>Shelf life</b>	24 months
<b>Others</b>	The standard UV luminescent pigments included are not suitable for outdoor use (BWS 1-3). Inks with more stable UV luminescent pigments are available on request.

**Important information:** Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application. You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, such claims shall be limited to the value of the goods delivered by us and utilized by you with respect to any and all damages not caused intentionally or by gross negligence. (T30 / 12/2020)