

Technical Information

UV ink

UV 161 LED UT Series

UV 161 LED UT Series is the LED-UV curable ink which is the adaptation of our longtime best-selling product called *UV 161 S Series* to the European market with its strict chemical regulations. Developed by advanced technology, **UV 161 LED UT Series** has excellent physical properties such as adhesion, curing & strong chemical resistances.

In addition to its excellent physical properties, **UV 161 LED UT Series** conforms to the "Exclusion List for printing inks and related products" issued by EuPIA (European Printing Ink Association).

Features

- Excellent curing property. Compatible with such as energy-saving UV systems, LE-UV, Ozone-less UV and LED-UV system
- Comply with EuPIA Exclusion Policy for Printing Inks and Related Products
- Benzophenone free formula
- Applicable to wide variety of substrates, such as paper, synthetic paper, and well-treated metalized paper
- Applicable to both printing system, sheet-fed offset and letterpress
- Conform to chemical regulations such as RoHS, SVHC of REACH etc.
- Pass low migration test under certain conditions.

Handling Instruction

- Do not expose to direct sunlight.
- Store in a cool dark place.
- Excessive ink film thickness deteriorates curing & adhesion.
- Surely pre-test and confirm whether UV 161 LED UT Series meets the required specification before running an actual job.
- Suitable for post-press finishing such as foil stamping, lamination under certain condition. Pre-test and confirm before running an actual job.
- Adhesion might deteriorate in case the printed matter gets wet including condensation.
- 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 ink 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 ink 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 161 LED UT Series.

General properties

Color	Lightfastness		Heat	Soap	Solvent
	Masstone	Dilution	Resistance	Resistance	Resistance
PROCESS YELLOW	5	3	4	5	5
PROCESS MAGENTA	4~5*	3*	4	2	4
PROCESS CYAN	8	7	5	5	5
PROCESS BLACK	7~8	7	5	5	5

Base colors & lightfastness inks are also available.

Evaluation: Lightfastness 8(excellent) \Leftrightarrow 1 (poor); Other Resistances: 5(excellent) \Leftrightarrow 1 (poor)

Test method

Lightfastness: Evaluate the lightfastness of printed matter by Fade-O-Meter. Classify the resistance on a scale from 1 to 8 based on the exposure time and the degree of fading. "Masstone" were tested without dilution, and "Dilution" by diluting them 10 times in a trans white.

Heat Resistance: Expose printed matter to 150 degrees (Celsius) heat in a drying oven for 10 minutes. Classify the resistance on a scale from 1 to 5 based on fading.

Soap Resistance: Applied 10% soap gel at 20~25 degrees (Celsius) to printed matter for 1 hour. Classify the resistance on a scale from 1 to 5 based on the degree of fading and bleeding in the soap gel.

Solvent Resistance: Immersed printed matter for 24 hours in a mixture of toluene and acetone in a 1:1 ratio at 20-25 degrees (Celsius). Classify the resistance on a scale from 1 to 5 based on the degree of fading and bleeding in the mixture.

^{*:} Lightfastness deteriorates significantly when getting wet with water.