

# **Technical Information**

**Best Cure** 

# **UV AD-LED Series**

**UV AD-LED Series** is the UV curable ink for energy saving UV system (LE-UV including Ozone-less UV, LED-UV) that is applicable to non-absorbent substrates.

With its wide water tolerance, **UV AD-LED Series** contributes to the improvement of operating efficiency by a great reduction of troubles caused by over emulsification which is general trouble for non-absorbent substrate printing.

#### Features

- Wide water tolerance
- Excellent curing property. Compatible with such energy saving UV system as LE-UV, Ozone-less UV, and LED-UV system
- Excellent adhesion & transferability to such non-absorbent substrates as PP, PE, PET, and metal foil paper
- Applicable to a wide variety of printing system such as sheet-fed offset printing, dry-offset printing
- Conforms to chemical regulations such as RoHS, Toxic Substances Control Act, The United States of America
- UV AD-LED UT Series, which conforms to "Exclusion Policy For Printing Inks And Related Products" established by EuPIA, is also available.

### Handling Instruction

- Do not expose to direct sunlight.
- Store in a cool dark place.
- Inking excessively deteriorates curing & adhesion.
- Surely pre-test to check the adhesion before running an actual job.
- Use printing material, and chemicals for UV ink.
- UV AD-LED Series is highly reactive to UV rays, and hence it might be cured in the ink duct if it is exposed under the fluorescent lamp for a long time. Please use a UV-cut fluorescent lamp/shade the ink duct in case skinning in the ink duct is found.
- To adjust the hardness of the ink, add UV DG REDUCER as tack adjuster up to a maximum of 5% or No.2 UV
  CONTEX K as shortening compound up to a maximum of 15%. Adding excessively deteriorates the curing property.
- Suitable for post-press finishing, such as foil stamping, lamination under certain conditions. Pre-test and confirm before proceeding with the actual job.
- Over print UV AD-LED OP V Q-3 in case strong rub resistance is required.
- 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 AD-LED Series.

### General properties

Color	Lightfastness		Heat	Soap	Solvent
	Masstone	Dilution	Resistance	Resistance	Resistance
PROCESS YELLOW	5	3	4	5	5
PROCESS MAGENTA	4 <b>~</b> 5*	3*	4	2	4
PROCESS CYAN	8	7	5	5	5
PROCESS BLACK	7 <b>~</b> 8	7	5	5	5
OPAQUE WHITE	8	7	5	5	5
EXTRA OPAQUE WHITE	8	7	5	5	5
TRANS WHITE	8	-	5	5	5

Evaluation: Lightfastness 8(excellent) ⇔ 1 (poor); Other Resistances: 5(excellent) ⇔ 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  $20\sim25$  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.

<sup>\*:</sup> Lightfastness deteriorates significantly when getting wet with water.