

Technical Information

BEST CURE

UV 161 NEXS Series

UV 161 NEXS Series, the next stage of UV ink with the concept of making a product that can be de facto standard in the global market, is evolved from UV 161 S Series, our long-time best-selling product among T&K TOKA's product portfolio.

Concentrating on our state-of-the-art technology, **UV 161 NEXS Series** adheres to a broad range of substrates from paper to well-treated plastic films while maintaining the curing property, which leads printing houses to integrate their ink inventory.

In addition, **UV 161 NEXS Series** performs stably on the press machine and has a strong water tolerance, which leads the operator to run the press machine without any stress.

Besides its excellent physical properties, we formulated **UV 161 NEXS Series** by safe chemical substances in order to address a growing movement to require the strengthening of regulation concerning the production and use of chemical substances and companies' voluntary efforts concerning the management of chemical substances.

Let's open up the next bright generation together with **UV 161 NEXS Series**.

Features

- > Applicable to both printing system, sheet-fed offset, and letterpress
- Conforms to major chemical regulations such as RoHS, SVHC of REACH
- Excellent curing property and adhesion. Compatible with such energy-saving UV system as LE-UV, Ozone-less UV and LED-UV system.
- Applicable to a wide variety of substrates, paper, synthetic paper, metalized paper, and well-treated plastic film
- > Best partner with goods in daily life such as commercial prints, packages, and labels

Handling Instruction

- Do not expose to direct sunlight.
- Store in a cool dark place.
- > Excessive ink film thickness deteriorates curing & adhesion.
- Surely pre-test before running an actual job to confirm the adhesion to the substrate.
- > 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 deteriorate the curing property.
- Suitable for post-press finishing such as foil stamping, lamination under certain condition. Please must do pretest 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 NEXS Series.

General properties

Color*	Lightfastness		Heat	Soap	Solvent
	Masstone	Dilution	Resistance	Resistance	Resistance
PROCESS YELLOW	4	3	4	5	5
TRANS YELLOW	6	5	5	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
OPAQUE WHITE	8	7	5	5	5
DEEP BLACK	7~8	5	5	2	2
TRANS WHITE	8	-	5	5	5
WARM RED	3	2	4	3	4
TRANS WARM RED	3*	2*	4	1	3
REFLEX BLUE	7	6 ~ 7	5	5	5
GREEN	8	7 ~ 8	5	5	5
P VIOLET	4*	2*	2	1	2
P PURPLE	4*	2*	2	1	2
LF MAGENTA	5	3	5	5	5
SLF YELLOW	6 ~ 7	5 ~ 6	5	5	5
SLF MAGENTA	6 ~ 7	5 ~ 6	5	5	5
SLF EXTRA WARM RED	6~7	5 ~ 6	5	5	5
SR EXTRA YELLOW	8	7	5	5	5
SR EXTRA RED	8	7	5	5	5
SR RHODAMINE RED	7-8	6-7	5	5	5
SR ORANGE	8	7	5	5	5
SR VIOLET	7~8	7	5	5	5

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 $20\sim25$ 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.

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

^{*}For each color shade, please kindly contact our sales for inquiry.