T&K TOKA Technical Information

UV Inks
UV 171 CT COLORS M-NW

"UV 171 CT COLORS M-NW" UV offset inks for Toray waterless lithographic plates were developed for general purpose sheet-fed and package printings.

■ Features

- Soft.
- Excels in drying property.
- Superior press stability.
- Excellent adherence and transferability.
- Enables excellent smoothness.
- Glossy.

■ Properties

- Tack Value : 7.0～7.5
- CTI （Print-surface smudging temperature） : 28℃
- * Tack Value: Ink-O-Meter (Water temprature:38℃, 400rpm, 1minute value)

■ Handling Instructions

- For printing materials use Toray waterless lithographic plates, for plate cleaning use our UV plate cleaning solution, and for roller cleaning use our UV Roller Cleaning Solution F.
- Use urethane resin type roller to prevent roller swelling and ink blockage on the press.
- Set moderate nip width for the roller that comes in contact with the print surface. (Wider nip width of finishing roller can cause stains)
- 25 to 28℃ is the appropriate print surface temperature for "UV 171 CT COLORS M-NW" inks. Therefore, control the print surface temperature by water cooling and maintain it within 25 to 28℃.
- Make sure to check the adhesion to the stock beforehand.
- Conduct pre-use tests to ascertain suitability when post printing processes, such as foil stamping, PP lamination, gluing, etc., are planned.
- Pay attention that leaving a non-absorbent stock print outdoor, or exposing it to water (including dew) causes adhesiveness to deteriorate to the extent that the printed object will peel-off even by a nail scratch.

■ Standard Colors and Resistances

Product Name	Light Resistance		Heat Resistance	Soap Resistance	Solvent Resistance
	Dark Color	Light Color			
Yellow	5	3	4	5	6
Magenta	4～5*	3*	4	2	4
Cyan	8	7	5	5	5
Black	7～8	7	3	2	2
Opaque White	8	7	5	5	5
Transparent White	8	-	5	5	5
Concentrated Warm Red	3*	2*	4	1	3
Lightfast Warm Red	4～5	3	4	3	4
Pink (Rhodamine Red)☆	4*	2*	2	1	2
Resistant Pink (Rhodamine Red)	8	7	5	5	5
Resistant Violet	7～8	7	5	5	5
Green	8	7～8	5	5	5
Super Lightfast Yellow	6～7	5～6	5	5	5
Super Lightfast Warm Red	6～7	5～6	5	5	5
Super Lightfast Magenta	6～7	5～6	5	5	5

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

＊Lightfastness deteriorates significantly when wet with water.

☆Migration may occur when exposed to water (including dew).

【 Test Procedures 】

Lightfastness : Conducted FADE-O-METER exposure test on print samples. Classified resistance on a scale of 1 to 8 on the basis of exposure time and degree of fade. Dark colors were tested without dilution, and light colors by diluting them 5 times in a medium.

Heat Resistance : Exposed print samples to 150℃ heat in a drying oven for 10 minutes. Classified resistance on a scale of 1 to 5 on the basis of fade.

Soap Resistance : Applied 10% soap gel at 20～25℃ to print samples for 1 hour. Classified resistance on a scale of 1 to 5 on the basis of degree of fade and bleed in the soap gel.

Solvent Resistance : Immersed print samples for 24 hours in a mixture of toluene and acetone in 1:1 ratio at 20-25℃. Classified resistance on a scale of 1 to 5 on the bases of degree of fade and bleed in the mixture.

- The data contained herein are based on the results of the tests conducted in accordance with the in-house test methods, and are not standard values. Always conduct pre-use tests to ascertain the suitability of the product to your requirements. Nothing contained herein is to be construed as a recommendation for use in violation of any patents, applicable laws or regulations. It is the responsibility of the user to comply in all respects with applicable laws and regulations.
- Owing to product improvement the information contained herein may be modified without any prior notice.
- Make sure to read MSDS thoroughly before using the product.