

May 2017

UV 171 UT

UV Ray Curing Printing Ink for Waterless Plate

UV 171 UT inks are UV offset inks for waterless plate by TORAY.

◆ FEATURES

- 1. Without 4-methylbenzophenone, benzophenone and hydroxybenzophenone.
- 2. Excellent curing property.
- 3. Good press stability.
- 4. Excellent ink transfer among rollers and onto substrates.
- 5. High gloss.

♦ STANDARD COLORS AND RESISTANCES

| Name of product | Light fastness Masstone Dilution(1/10) | | Heat | Soap | Solvent |
|-----------------------------|---|----------------|----------|------|----------|
| | massione | Dilution(1/10) | | | |
| UV 171 Yellow H UT | 5 | 3 | 4 | 5 | 5 |
| UV 171 Magenta H UT | $4\sim5^{\star}$ | 3* | 4 | 2 | 4 |
| UV 171 Cyan H UT | 8 | 7 | 5 | 5 | 5 |
| UV 171 Black H UT | $7\sim 8$ | 7 | 5 | 5 | 5 |
| UV 171 P Yellow H UT | 5 | 3 | 4 | 5 | 5 |
| UV 171 P Warm Red H UT | 3* | 2* | 4 | 1 | 3 |
| UV 171 P Rubine Red H UT | $4\sim5^{*}$ | 3* | 4 | 2 | 4 |
| UV 171 P Rhodamine Red H UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P 021 Orange H UT | 8 | 7 | 5 | 5 | 5 |
| UV 171 P 032 Red H UT | 6 | 5 | 2 | 4 | 4 |
| UV 171 P Purple H UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P Violet H UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P Reflex Blue H UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P Process Blue H UT | 8 | 7 | 5 | 5 | 5 |
| UV 171 P 072 Blue H UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P Green H UT | 8 | $7\sim 8$ | 5 | 5 | 5 |
| UV 171 P Mixing Black H UT | $7 \sim 8$ | 7 | 5 | 5 | 5 |
| UV 171 Opaque White H UT | 8 | 7 | 5 | 5 | 5 |
| UV 171 Trans White H UT | 8 | | 5 | 5 | 5 |
| UV 171 Dense Black H UT | 7 | 5 | 5 | 3 | 3 |
| UV 171 P Reflex Blue R UT | 4* | 2* | 2 | 1 | 2 |
| UV 171 P 072 Blue R UT | 4* | 2* | 2 | 1 | 2 |

Lightfastness Colors and Resistance Colors are available.

PRODUCT DATA SHEET

Light-fastness of the ink marked "*" extremely deteriorates when wet by rain or moisture. Tested figures of light-fastness shall read, 8 = excellent, 1 = poor. The others, 5 = excellent, 1 = poor.

<Testing methods of resistances>

Light-fastness

Printed sample is exposed in Fade-O-Meter and is distinguished into 8 steps in accordance with its discolored degree and exposed period.

Heat resistance

Printed sample is heated at 150°C in hot air circulating dry oven for 10 minutes and is distinguished into 5 steps in accordance with its discoloration degree.

Soap resistance

Printed sample is placed on a gel of 10% soap at 20-25°C for 1 hour, and is distinguished into 5 steps in accordance with its discoloration degree and bleeding degree onto the gel.

Solvent resistance

Printed sample is dipped into the blend of Toluene and Acetone by 1 to 1 at 20-25°C for 24 hours and is distinguished into 5 steps in accordance with bleeding degree into the blend.

Remarks

- 1. Negative plate can be used without additional treatment.
- 2. Positive plate should be burning treated.
- 3. Resin type roller (Granpaul UV) is recommended to prevent ink penetration into roller and swell of roller.
- 4. Temperature control of plate surface is essential for good printing. (cold air to plate surface, chilled water through roller)
- 5. When reducer is used, add UV No.2 Contex as shortening compound up to 15%. Excess amount of addition causes inferior curing.
- 6. Keep away from direct sunlight.
- 7. Store in a cool and dark place (below 30° C).
- 8. This ink does not stick well to some substrates. Always pretest the ink on the substrate to be used for sufficient adhesion.
- 9. Gluing and hot stamping can be done depending on the conditions. Carefully select glue and foil and always pretest glue and foil and always pretest them for required quality.
- 10. Although this ink is designed not to affect human body, if the ink is stick to the skin or cloth and left un-removed for long hours, some people may get a rash. Wear protective instruments and wash hands after work without fail.

The inks may be reformulated at our own discretion for improvement without any prior notice.



 $[\]ddagger$ The information contained herein is based on the results according to the test methods of our company and believed to be accurate. However, as the conditions of use lie outside our control, no liability for loss or damage incurred by use of this product through reliance of this information can be accepted. It is the sole responsibility of the user to test and determine to use the products.

Always pretest the inks on the substrates for required adhesion, color, product resistances and other characteristics before running the complete job as the final product suitability rests with the printer.

[☆]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.