

UV PAL Ink series (UV Curable Ink)

UV PAL Ink is an UV Curable screen ink. It is applicable to a wide range of printing materials, is fast curing, and can be layered with a various solvent type screen ink.

Applications	Various markings and nameplates		
Special Features	<ul style="list-style-type: none"> • Widely applicable to plastics, painted boards, etc. • Good weather resistance, low odor, and low skin irritation. • Capable of layering with various types of inks, with a high-gloss finish. • Excellent stencil stability and curing properties 		
Substrate	PC, Soft & Rigid PVC (thin materials, cutting, and punching are not acceptable), ABS, AS, wood, paper, PS, painted boards.		
Dilution	No dilution generally (If dilution is required, use RE-801 or RE-802 REDUCER less than 10%) RE-801: Accelerated curing type RE-802: Standard type		
Catalyst/Promoter mixing	SM-400 ADDITIVE 10 to 20% (when scratch resistance needs to be improved, not suitable for soft materials)		
Additives	SM-269 DEFOAMER Less than 1% (If foaming or cissing occurs) SM-301 FLOW AGENT Less than 1% (If surface leveling improvements are needed)		
Recommended Cleaner	<ul style="list-style-type: none"> • Screen Cleaner L2 • Applicable to machine cleaning with less hazardous glycol ether types (Glycol ether type cleaning may not be suitable for some types of stencil emulsions, so please be sure to test it beforehand.) 		
Mesh	T 300 to 420 mesh (Coverage is 60 to 90m ² /kg)		
Drying/Curing	Accumulated energy: about 380mJ/cm ² , Peak Power:400mW/cm ² (Eye Graphics UV integral light counter) A rough standard: Two 80W/cm Metal halide lamps, lamp height 15 cm, belt speed 10m/min		
Standard Colors	000 MEDIUM 011 MATT BASE 121 SCARLET 163 RED 177 OPAQUE RED 182 RED 190 BRIGHT RED 221 YELLOW	263 REDDISH YELLOW 271 OPAQUE LIGHT YELLOW 277 OPAQUE REDDISH YELLOW 391 BLUE 525 ORANGE 581 MAGENTA 611 WHITE 616 WHITE	797 GREEN 821 VIOLET 911 BLACK 052TC YELLOW 135TC MAGENTA 215TC CYAN 915TC BLACK *616 WHITE is non-yellowing type.

Caution

- Checking adhesion before production: Adhesion may change depending on the substrates, processes, and printing. Be sure to check the adhesiveness before mass production printing.
- Do not use for printed materials to be placed inside the packages of optical discs such as CDs and CD-Rs.
- Ink shelf life: 12 months from production date, unopened

Safety

UN No.: Not classified in the definition
 UN Classification: Not classified in the definition

Handling

- Use safety gloves and eyeglasses to protect skin and eyes. If the ink comes in contact with skin, wash with soap and plenty of water (or lukewarm water) and consult with a doctor.
- Containers should be closed tightly after use and stored in a cool and dark place.
- SDS is available upon request. Please request a copy and read it carefully before handling the products.

Resistanc

Test item	Test Conditions	Test results
Adhesion	JIS K 5600-5-6(cross-cut), 1mm interval 6×6、 cellophane tape peel	0(no peel)
Pencil Hardness	JIS K 5600-5-4:ISO 15184(pencil)、 Weight 750g, Hardness which does not make scar	F
Heat	80°C 72 hrs. Check appearance and peel off from the substrate	No defect
Hot Water	JIS K 5600-6-2, Soak 72 hrs. in 50°C hot water、 check appearance and peel off	No defect
Humidity and cool-heat cycling test	JIS K 5600-7-4, 10 cycles 80°C(4hrs)~25°C(1hr)~-20°C(4hrs)~25°C(1hr) Check appearance and peel off	No defect
Humidity	JIS K 5600-7-2 (Continuous condensation) 60°C 97% RH 240 hrs. check appearance and peel off	No defect
Boiling	Soak 5 min in tap water, check appearance and peel off	No defect
Water	Soak 240 hrs. in tap water, check appearance and peel off	No defect
Acid	Soak 24 hrs. 5% HCl, check appearance	No defect
Alkali	Soak 24 hrs. 5% NaOH, check appearance	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethyl alcohol, weight 200g, 30 back and forth, check peel off	No defect
Gasoline	Soak 30 min, check appearance	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 500 back and forth, check color fade	No defect
Blocking	Weight 200g/cm ² 、 60°C 100 hrs.	No defect
Falling-weight test	JIS K5600-5-3 Dupont Impulse Tester, drop 300g weight, from 50cm height	No defect
Multi-printing	5 colors multi-printing, check appearance and adhesion	No defect
Accelerated Weathering	JIS K-5600-7-7:ISO 11341: Weather meter (Xenon Lamp), BP temp. 63+/-3°C, raining rate 18 min/120min, check color fade and peel off	(800-1500hrs) No defect

*Test condition 【80W/cm² Metal halide lamps, height 15cm, belt speed 10m/min】
 【T 350】 【Substrate: Polycarbonate】

*Above resistance test results are measured results in our laboratory and they are not guaranteed values.

*Information contained in this catalog may change without prior notice.

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