

## UV FLX Ink series (UV curable ink for nameplates)

UV FLX ink series is a UV curable screen printing ink with superior opacity and multi-layer printability compared to conventional UV screen inks, and excellent performance in post-processing molding by vacuum molding, pressure air forming, etc. It can be used for a wide range of applications such as automobile meters, control panels, and home appliance nameplates.

<b>Applications</b>	Film insert products in general such as automobile interior and home appliance nameplates.			
<b>Special Features</b>	<ul style="list-style-type: none"> <li>• Excellent opacity</li> <li>• Excellent multi-layer printability</li> <li>• Applicable to film insert molding by combining with IMB binder</li> </ul>			
<b>Substrate</b>	PC more than 0.3m, Easy adhesion treated PET, ABS more than 125µm.			
<b>Dilution</b>	Dilution not required (If dilution is required, use RE-877 REDUCER within 5 to 10%)			
<b>Additives</b>	SM-269 DEFOAMER 0 to 1% (if foaming or cissing occurs)			
<b>Recommended Cleaner</b>	<ul style="list-style-type: none"> <li>• Screen Cleaner L2</li> <li>• 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.)</li> </ul>			
<b>Mesh</b>	T 300 to 380 mesh (Coverage is 70 to 90m <sup>2</sup> /kg at 300 mesh) In terms of opacity, printing an ink layer thickness of 10-11 µm ± 2 µm with T 300 mesh is recommended.			
<b>Drying/Curing</b>	Accumulated energy: 800 to 1000mJ/cm <sup>2</sup> , Peak power:800 to 1000mW/cm <sup>2</sup> (Eye Graphics UV integral light counter) A rough standard: Two 120W/cm Metal halide lamps, lamp height 8 cm, belt speed 8m/min			
<b>Standard Colors</b>	000 MEDIUM	175 RED	277 OPAQUE REDDISH YELLOW	797 GREEN
	001 VICTORIA	182 RED	391 BLUE	821 VIOLET
	168 SCARLET	234 LIGHT YELLOW	581 MAGENTA	911 BLACK
	174 RED	263 REDDISH YELLOW	672 OPAQUE WHITE	972 BLACK

<b>Caution</b>	<ul style="list-style-type: none"> <li>• Checking adhesion before production: Adhesion may change depending on the substrates, processes, and printing. Be sure to check the adhesiveness before mass production printing.</li> <li>• Preliminary confirmation of molding conditions: In post-processing molding by vacuum molding, pressure air forming, and insert molding etc., the conditions of design print curing, molding temperature, molding pressure, molding time, mold shape, type of molding resin, etc. affect the molding process. Please conduct sufficient preliminary tests and set each condition appropriately before use.</li> </ul>
<b>Safety</b>	UN No.: Not classified in the definition UN Classification: Not classified in the definition
<b>Handling</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Containers should be closed tightly after use and stored in a cool and dark place.</li> <li>• SDS is available upon request. Please request a copy and read it carefully before handling the products.</li> </ul>

## Resistance

Test item	Test Conditions	Test results
Adhesion	JIS K 5600-5-6(cross-cut), 1mm interval 6×6, cellophane tape and peel	0(no peel)
Pencil Hardness	JIS K 5600-5-4 (pencil), Weight 750g, Hardness of the pencil which does not make scar.	6B
Heat	90°C 192 hrs. check appearance and peel off	No defect
Humidity and cool-heat cycling test	JIS 5600-7-4 10 cycles, 100°C(2hrs)~25°C(2hrs)~-40°C(2hrs)~25°C(2hrs) check appearance and peel off	No defect
Humidity	JIS K 5600-7-2 (Continuous condensation) 65°C 95%RH, 96 hrs., check appearance and peel off	No defect
Out-gas	Covered with Acrylic plate, 103°C 48 hrs. check haze of the plate	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethyl alcohol, weight 200g, 10 back and forth, check peel off	Slight gloss change
Detergent	Cotton soaked "Mama Lemon" soaked, weight 200g, 10 back and forth, check appearance.	No defect
Artificial Sweat	Artificial sweat, cotton soaked, weight 200g, 10 back and forth, check appearance.	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 30 back and forth, check color fade	No defect
Bend	JIS K5600-5-1(Cylindrical Mandrel) 3mmø, check cracks	No defect
Punching	Punching by press machine	No defect
Blocking	Weight 200g/cm <sup>2</sup> 80°C	No defect
Accelerated Weathering	Weather-meter, BP Temp. 63±3°C, check color fade and peel off	(600hrs.) No defect

\*Test condition 【120W/cm<sup>2</sup> Metal halide lamps, height 8cm, belt speed 8m/min】  
 【T 300】 【Substrate: PC 0.5t】

\*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.

Revised :2023.09.01.