

## UV DVC Ink series (UV Curable Ink)

UV DVC ink is UV curable screen ink widely applicable to optical media such as CD-R and polycarbonate substrates.

<b>Applications</b>	Label printing of Optical discs in general		
<b>Special Features</b>	<ul style="list-style-type: none"> <li>• Prevents “block errors” caused by ink</li> <li>• Amine-free</li> <li>• Low odor, low skin irritation, safe and easy to handle ink</li> </ul>		
<b>Substrate</b>	Various CD/DVD, Polycarbonate substrates		
<b>Dilution</b>	Not required (Use RE-806 REDUCER within 5% when required)		
<b>Catalyst/Promoter mixing</b>	SM-510 ADDITIVE 0 to 3% (If curability of ink is slow)		
<b>Additives</b>	SM-269 DEFOAMER 0 to 1% (if foaming or repelling occurs) UV Thixotropic Agent 0 to 2% (to increase viscosity)		
<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 420 mesh (Coverage is 50 to 60m <sup>2</sup> /kg)		
<b>Drying/Curing</b>	Accumulated energy: about 380mJ/cm <sup>2</sup> 、Peak power:400mW/cm <sup>2</sup> (Eye Graphics UV integral light counter) Two 80W/cm Metal halide lamps, lamp height 15 cm, belt speed 10m/min		
<b>Standard Colors</b>	000 MEDIUM	221 YELLOW	617 WHITE
	011 MATT BASE	240 LIGHT YELLOW	659 WHITE
	121 SCARLET	277 OPAQUE REDDISH YELLOW	797 GREEN
	160 SCARLET	525 ORANGE	821 VIOLET
	177 OPAQUE RED	581 MAGENTA	911 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>• Ink shelf life: stable for 12 months from shipping date</li> </ul>		

**Safety**

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

**Resistance**

Test item	Test Condition	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 which does not make scar.	2B
Heat	80°C 500 hrs. check appearance and peel off	No defect
Hot-cold cycling	JIS K 5600-7-4 5 cycles, 80°C(4h)~25°C(1h)~-40°C(4h) Check appearance and peel off	No defect
Humidity (1)	JIS K 5600-7-2(Continuous condensation) 60°C 85%RH 500 hrs. check appearance and peel off	No defect
Humidity (2)	JIS K 5600-7-2(Continuous condensation) 55°C 98%RH 500 hrs. check appearance and peel off	No defect
Cold	-40°C 500 hrs. check appearance and peel off	No defect
Alcohol	Gakushin scrub tester, cotton ethanol soaked, weight 500g, 3 back and forth, check peel off	Almost no whitening
Over printing	Overprinting of 6 to 7 colors, check appearance and peel off	No defect
Bend	80°C 90%RH 150 hrs. warpage change of CD prints	Tilt angle less than 0.2
Haze on PC(substrate)	Effect on PC substrate of uncured prints at 60°C	No effect
Haze on PS(case)	Effect on PS substrate of uncured prints at 60°C	No effect
Sticking to OPP film	After enclosing in non-woven fabrics, store for 24 hrs. at 40°C 90%RH, check appearance.	No defect
High speed printing	Disc printing press, compatible to printing speed, Tact time 0.6 sec to 2.0 sec	Compatible

\*Test condition 【120W/cm 1 Metal halide lamp, Tact speed 2.0 sec.(30pcs/min)】  
 【T 380】【Substrate: Dummy CD, CD-R, DVD】

\*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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