

EGR Ink series (Ink for Polyester Films)

EGR inks show good adhesion to various polyester films. Slow-drying ink suitable for fine printing. It is a printing ink with excellent post-processing properties, especially for nameplates.

Applications	Nameplates, membrane switches, PET stickers						
Special Features	<ul style="list-style-type: none"> • Semi-gloss finish ink layer with excellent embossing resistance and lightfastness • Use of catalyst can improve ink layer resistance 						
Substrate	<ul style="list-style-type: none"> • Various PET films or PER stickers • PC 						
Dilution	G-001 SOLVENT(fast) G-002(standard) G-003(slow) G-004(extra slow) DILUTION 5-20%						
Catalyst/Promoter mixing	<p>Not necessary *For enhanced adhesion, a catalyst can be used in combination. In this case, please use the following *The ink will turn to gel after the pot life has expired. Be sure to mix only enough to use</p> <table border="0"> <tr> <td>96 CATALYST 3-5% (Priority: Resistance and adhesion)</td> <td>Pot life 4-5 hrs.</td> </tr> <tr> <td>101 CATALYST 7% (When weather resistance is not required)</td> <td>Pot life 2-3 hrs.</td> </tr> </table>			96 CATALYST 3-5% (Priority: Resistance and adhesion)	Pot life 4-5 hrs.	101 CATALYST 7% (When weather resistance is not required)	Pot life 2-3 hrs.
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Additives	Leveling agent 0-2% (to improve leveling) SM-40 Defoamer 0-2% (For defoaming requiring transparency)						
Recommended Cleaner	Screen Cleaner L2 or G-002 Solvent						
Mesh	T-200 to 270 mesh (Coverage would be 35-50m ² /kg at 250 mesh)						
Drying	60°C 40 min or 80°C 30 min *Ensure sufficient drying	<u>Overprint</u> Each layer 60°C 10 min (tack free) Final layer 60°C 40 min or 80°C 30 min					
Standard Colors	000MEDIUM 001VICTORIA 003 BRIGHT RED 121SCARLET 161SCARLET 177OPAQUE RED 182RED 221YELLOW	231 YELLOW 263 REDDISH YELLOW 271 OPAQUE LIGHT YELLOW 277 OPAQUE REDDISH YELLOW 391 BLUE 525 ORANGE 577 OPAQUE ORANGE 581 MAGENTA	611 WHITE 621 WHITE 671 OPAQUE WHITE 675 OPAQUE WHITE 797 GREEN 821 VIOLET 911 BLACK 971 BLACK				

Caution

- Checking before commercialization: Adhesion and resistance properties may change due to differences in substrates, processes, printing and drying conditions. Be sure to check the adhesiveness and resistance properties before mass production printing
- Ink shelf life: 24 months from production date, unopened.

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 items	Test conditions	Test results
Adhesion	JIS K 5600-5-6:ISO2409(Cross-cut)、1mm interval 6x6 cuts、Cellophane tape and peel	0No peel off)
Scratch hardness	JIS K 5600-5-4:ISO 15184(Pencil method)、750g weight, hardness of the pencil which does not make scar	H
Heat	JIS K 5600-6-3:ISO 3248、150°C、100H、check appearance and peeling off from the substrate	No defect
Hot water	JIS K 5600-6-2: ISO 2812-2、60°C warm water、Soak 48 hrs.、check appearance and peeling off from the substrate	No defect
Humidity and cool-heat cycling test	JIS K 5600-7-4 10 cycles, 50°C, 95%RH(13H) ~-20°C(3H)~-25°C(30H)~ 20°C(0.5H) check appearance and peeling off from the substrate	No defect
Acid	7hrs. in 5% H ₂ SO ₄ , check appearance of ink layer and peeling off from the substrate	No defect
Alkaline	7 hrs. in 5% NaOH, check appearance and peeling off from the substrate	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethanol, 200g weight, 50 back and forth. Check peeling off	No defect
Scrub	Gakusin scrub tester, with cotton, 1000g weight, 200 back and forth, check color fade	No defect
Bend test	JIS K 5600-5-1: ISO 1519 (Cylindrical Mandrel) 2mm dia. Check crack	No defect
Falling-weight test	JIS K 5600-5-3 DuPont Impulse tester, drop 1kg from 50cm height	No defect
Embossing	JIS K 5400 8.2 (Erichsen Tester), Push-in distance at which crack appears in printed layer	7 mm
Punching	Punching by press machine	No defect
Accelerated weathering (Carbon-arc)	JIS K5400 9.8.1 Weather meter with carbon arc, BP temp. 63+/-3°C: Rain rate 18 min/120 min、check color fade and peeling off	No defect

*Test conditions 【EGR-911 BLACK】 【G-002 Solvent 20%】 【80°C 30min】
【T-250】 【Substrate: 125µm PET】

*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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