

ERX Ink series

(Low-odor, Environmentally-friendly ink for Nameplates)

ERX inks are low-odor, environmentally friendly inks that do not contain environmentally hazardous substances such as benzene, toluene, xylene, and isophorone. One-pack screen printing ink with excellent re-solubility, suitable for fine printing of nameplates, etc., and excellent flexibility and heat resistance of the during post-processing.

Applications	Nameplates for home appliance and automobile		
Special Features	<ul style="list-style-type: none"> • Good adhesion to various substrate and low odor • Semi-gloss finish with excellent weather resistance and heat resistance 		
Substrates	Easy-adhesion PET film, PC(Polycarbonate) film and sheet *Annealing (preheating) may be required for some materials, please check before use.		
Dilution	F-001 SOLVENT (extra fast dry) F-002 SOLVENT (fast dry) F-003 SOLVENT (standard) Z-705 SOLVENT (slow dry) DILUTION 10 to 15%		
Catalyst/Promoter mixing	Not necessary		
Additives	SM-40 DEFOAMER 3% or less (for anti-foam and improve leveling)		
Recommended Cleaner	Screen Cleaner L2		
Mesh	T200 to 300 mesh (Coverage is Black 35 to 40 m ² /kg, White 30 to 35m ² /kg at 250 mesh).		
Drying	80°C 30 min *Insufficient drying may cause blocking, please dry thoroughly.	<u>Overprint</u> Each layer 80°C 10 min (tack-free) Final layer 80°C 30 min	

Standard Colors	000MEDIUM	221 YELLOW	581 MAGENTA
	001VICTORIA	246 LIGHT YELLOW	611 WHITE
	003 BRIGHT RED	263 REDDISH YELLOW	621 WHITE
	121SCARLET	271 OPAQUE LIGHT YELLOW	675 OPAQUE WHITE
	161SCARLET	277 OPAQUE REDDISH YELLOW	797 GREEN
	168SCARLET	391 BLUE	821 VIOLET
	177OPAQUE RED	525 ORANGE	911 BLACK
	182RED	577 OPAQUE ORANGE	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	0(No 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	110°C、48 hrs.、check appearance and peeling off from the substrate	No defect
Water	168 hrs. in city water	No defect
Hot Water	Soak 48 hrs. in 40°C warm water, check appearance of ink layer and peel off	No defect
Acid	24hrs. in 5% HCl, check appearance of ink layer and peeling off from the substrate	No defect
Alkaline	24 hrs. in 5% NaOH, check appearance and peeling off from the substrate	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethanol, 500g weight, 50 back and forth. Check peeling off	No defect
Scrub	Gakushin scrub tester, with cotton, 500g weight, 500 back and forth, check color fade	No defect
Falling-weight test	JIS K 5600-5-3 DuPont Impulse tester, drop 500g from 50cm height	No defect
Bending	180° Bending tester	No defect
Punching	Punching by press machine	No defect
Accelerated weathering	JIS K-5600-7-7: ISO 11341 Weather meter (Xenon lamp), BP temp. 63+/-3°C: Rain rate 18 min/120 min、check color fade and peeling off	No defect

*Test conditions 【ERX-971 BLACK】【F-003 Solvent 15%】【80°C 30min】
 【T 250】【Substrate: 0.5mm Polycarbonate (Sumitomo Bakelite EC100)】

*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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