

XER Ink series

(One-pack type High Definition ink for Nameplates)

High Quality and High Definition screen printing ink can produce solid printing and fine pattern faithfully and enables stable printing of 100μm width fine line with high accuracy. XER Ink is one pack type screen ink which is suitable for printing fine line or characters on name plate, etc., and provides printed ink layer with excellent flexibility and heat resistance at post-processing.

Applications	Home appliance nameplates, automobile nameplates		
Special Features	<ul style="list-style-type: none"> • Enables extremely high precision printing such as 100μm width fine line and dot, etc. • Excellent printing stability and high-speed printing printability. • Printing ink layer provides excellent adhesion property. • Standard colors with excellent weather resistance and heat resistance are available 		
Substrate	Easy adhesion treated PET film, PC (Polycarbonate) film, sheet *Annealing (preheating) may be required depending on the material, so please check before use.		
Dilution	XZ-705 SOLVENT Dilution: 0 to 5% *Defoamer and other agents may separate over time, please stir the ink thoroughly before use. *Do not use other solvents as they may adversely affect curing, adhesion, stencil stability, or other properties.		
Catalyst/Promoter mixing	Not required		
Additives	XSM-40 DEFOAMER Less than 1% (For anti-foam and improvement in leveling)		
Recommended Cleaner	Screen Cleaner L2		
Mesh	L-355 Mesh (Coverage of 971 Black is about 80m ² /kg at L-355 mesh) *Recommendation: L-screen 355 mesh made by NBC Meshtech *T 350 mesh can also be used for printing		
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	001 VICTORIA 168 SCARLET 177 RED 246 LIGHT YELLOW 277 REDDISH YELLOW 391 BLUE	526 ORANGE 581 MAGENTA 675 WHITE 797 GREEN 821 VIOLET 971 BLACK	052TC YELLOW 135TC MAGENTA 215TC CYAN 915TC BLACK

Caution	<ul style="list-style-type: none"> • Checking before production: 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 UN Classification: Not classified in the definition
Handling	<ul style="list-style-type: none"> • 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 Conditions	Test results
Adhesion	JIS K 5600-5-6:ISO2409(cross-cut)、1mm interval 6×6、cellophane tape and peel off	0(peel off)
Heat	110°C、48 hrs.、check appearance and peel off from the substrate	No defect
Water	Soak 168 hrs. in tap water, check appearance and peel off from the substrate	No defect
Hot Water	Soak 48 hrs. in 40°C warm water, check appearance and peel off from the substrate	No defect
Acid	Soak 24 hrs. in 5% HCl, check appearance and peel off from the substrate	No defect
Alkaline	Soak 24 hrs. in 5% NaOH, check appearance and peel off from the substrate	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethyl alcohol, weight 500g, 50 back and forth, check peel off	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 500 back and forth, check color fade	No defect
Falling-weight test	JIS K5600-5-3 DuPont Impact tester, drop 500g weight from 50 cm,	No defect
Bend test	JIS K5600-5-1: ISO 1519: (Cylindrical Mandrel) 2mmφ, check cracks	No defect
Punching	Punching by press machine	No defect
Accelerated Weathering	JIS K-5600-7-7:ISO 11341: (Xenon Lamp) Weather meter, BP Temp. 63+/-3°C Raining rate 18 min/120 min, check color fade and peel off	1000 hrs. No defect

*Test conditions 【XER-971 BLACK】 【80°C 30 min】

【L 355】 【Substrate: 0.5 mm 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.

Revised : 2023.09.01