

MRX-HF Ink series

(Two-pack type, Halogen Free ink for Hard Coat)

MRX-HF ink is environmentally friendly 2 pack type ink series that does not intentionally use halogen compounds (chlorine Cl, bromine Br) in raw materials. It is suitable for wide range of decorative printing thanks to its excellent adhesion to hard coated plastic plate and post-processing properties such as cutting.

Application	Screen frame printing for car navigations, gaming devices and display panels, etc.			
Special Features	<ul style="list-style-type: none"> · Halogen free (Chlorine Cl, Bromine Br) · Excellent adhesion to hard coated sheet · Excellent suitability to post-processing, such as cutting 			
Substrate	Hard coated acrylic plate, PC plate			
Dilution	G-001 SOLVENT (extra fast) G-002 SOLVENT (fast) G-003 SOLVENT (standard) Z-004 SOLVENT (slow) Dilution: 5 to 15% *Do not use other solvents as they may cause contamination of halogen compounds and may adversely affect curing, adhesion, stencil stability, or other properties.			
Catalyst/Promoter mixing	210 Catalyst 5% (standard)		Pot life 3 to 8 hrs.	
	106 Catalyst 10% (to improve curing property)		Pot life 1 to 3 hrs.	
	*The ink will turn to gel after the pot life has expired. Be sure to mix only enough to use			
Additives	SM-40 DEFOAMER 2% (For anti-foam and improvement in leveling)			
Recommended Cleaner	Screen Cleaner L2 or G-002 SOLVENT			
Mesh	T 200 to 300 mesh (coverage would be 35 to 40 m ² /kg with Black ink, 35~40m ² /kg with White ink, at 250 mesh)			
Drying	80°C 30 min or 60°C 60 min	<u>Overprint</u> Each layer 60 to 80°C 10 min (tack-free) Final layer 80°C 30 min or 60°C 60 min		
Standard Colors	HF000 MEDIUM	HF189 RED	HF529 ORANGE	HF829 VIOLET
	HF001 VICTORIA	HF239 LIGHT YELLOW	HF589 MAGENTA	HF919 BLACK
	HF169 SCARLET	HF249 LIGHT YELLOW	HF599 MAGENTA	HF939 NC BLACK
	HF179 RED	HF399 BLUE	HF619 WHITE	HF PIANO BLACK

Caution

- Do not use solvents and catalysts other than the designated ones because of the possibility of contamination with halogen compounds.
- Please check the squeegee rubber, emulsion, materials and substrates before use, as they may contain halogen compounds.
- 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.: 1210
UN Classification: Class 3 Flammable Liquids (Flash point is over 23 Degree C)

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 Conditions	Test results
Adhesion	JIS K 5600-5-6:ISO2409(cross-cut)、1mm interval 6×6、cellophane tape & peel	0(no peel)
Pencil Hardness	JIS K 5600-5-4:ISO 15184(pencil)、Weight 750g, Pencil hardness which does not make scar	2H
Nail scratch	Nail peeling test	No peel
Heat	80°C、168H、check appearance and peel	No defect
Hot Water	JIS K 5600-6-2: Soak 168 hrs. in 60°C hot water、check appearance and peel off from the substrate	No defect
Humidity	JIS K 5600-7-2(continuous dew drop) 50°C,95%RH 168 hrs. check appearance and peel off from the substrate.	No defect
Scrub	Gakushin scrub tester, cotton soaked ethanol, 500g weight, 1000 back and forth, check color fade	No defect
Accelerated Weathering	Weathering test equipment with Xenon lamp, 1000 hrs. BP temp.63+/-3°C raining rate 18 min/120 min, check color fade and peel off.	ΔE* < 5 No defect
Light fastness	Fade meter with carbon arc, 600 hrs. BP temp. 63+/-3°C, check color fade and peel off	ΔE* < 2 No defect

*Test condition 【MRX-HF919 BLACK】 【210 CATALYST 5%】 【Z-004 SOLVENT 15%】
【80°C 30 min】 【T 250】 【Substrate: MR-200 by Mitsubishi Chemical】

*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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