

MRX-HF(LV) Ink series

(Halogen Free, Environmentally Friendly 2 pack type ink for Hard Coat)

MRX-HF(LV) series is an environment-friendly 2 pack type ink that does not intentionally use halogen compounds (chlorine Cl, bromine Br) in raw materials and reduces polycyclic hydrocarbons (PAHs) such as naphthalene to 500 ppm or less.

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) and naphthalene free • Excellent adhesion to hard coated sheet • Excellent suitability to post-processing, such as cutting 		
Substrate	Hard coat treated acrylic plate, PC plate		
Dilution	Z-701 SOLVENT (fast) Z-004 SOLVENT (standard) Z-705 SOLVENT (slow) Dilution: 5 to 15% *Do not use other solvents as they may cause contamination of halogen compounds and PAHs, and may adversely affect curing, adhesion, stencil stability, or other properties.		
Catalyst/Promoter mixing	210 Catalyst 5% (standard) 106 Catalyst 10% (to improve curing property)	Pot life 3 to 8 hrs. Pot life 1 to 3 hrs.	
Additives	SM-40 DEFOAMER 2% (For anti-foam and improving leveling)		
Recommended Cleaner	NF-003 SOLVENT		
Mesh	T 200 to 350 mesh (Coverage would be about 35m ² /kg 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	HF(LV)000 MEDIUM HF(LV)001 VICTORIA HF(LV)169 SCARLET HF(LV)179 RED	HF(LV)239 LIGHT YELLOW HF(LV)249 LIGHT YELLOW HF(LV)399 BLUE HF(LV)589 MAGENTA	HF(LV)619 WHITE HF(LV)829 VIOLET HF(LV)919 BLACK HF(LV)939 NC BLACK HF(LV)989 PIANO BLACK

Caution

- Do not use solvents and catalysts other than the designated ones because of the possibility of contamination with halogen compounds and polycyclic aromatic hydrocarbons (PAHs).
- 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: 36 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 off from the substrate	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, 500g weight, 500 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.	No defect

*Test condition 【MRX-HF(LV)919 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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