IRX-HF Ink series

(IR Transmittable ink for Glass)

IRX-HF ink is environmentally-friendly, two pack type IR transmittable ink for glass that does not intentionally use Halogen (Chlorine Cl, Bromine Br) compounds in raw materials. It has superior finish in terms of transparency and leveling properties, compared to IR inks of GLS-HF ink series.

Applications	Infrared sensor part of cell phones, PCs, home appliances, etc.
Special Features	・ Transmits infrared rays and blocks visible light. ・ No intentional use of Halogen (Chlorine Cl, Bromine Br) compounds in raw materials.（Cl ≦900ppm, Br ≦900ppm, Cl+Br ≦1500ppm） ・ Compared with IR ink of GLS-HF ink series, it is possible to create printed materials with excellent transparency and leveling.
Substrate	Glass plate
Dilution	Z-705 SOLVENT (slow)　Dilution: 5 to 10% *Do not use other solvents as they may cause contamination of halogen, curing, adhesion, stencil stability, and other adverse effects.
Catalyst/Promoter mixing	GLS GLASS PROMOTER 0.5%　　Pot life: 6 hrs. (Be sure to add it, otherwise ink will not adhere) *The ink will not turn to gel after the pot life (6 hrs.) has expired. Due to its poor adhesion and resistance, be sure to mix only enough to use.
Additives	SM-40 DEFOAMER less than 1% (For anti-foam and improving leveling)
Recommended Cleaner	Screen Cleaner L2
Mesh	T 300 to 420 mesh
Drying	160℃ 30 min <u>Overprint</u> Each layer　160℃ 10 min(tack-free) Final layer　160℃ 30 min
Standard Colors	・ We offer color matching products according to your transmittance rate request. ・ HF001 VICTORIA is available for adjusting density at the time of printing. When using HF001 VICTORIA, be sure to measure and confirm transmittance rate before printing.

Cautions	・ Due to the possibilities of contamination with halogen compounds, only designated solvents and additives can be used. ・ 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: 6 months from production date, unopened. (12 months for HF001 VICTORIA)
Safety	UN No.: Not classified in the definition UN Classification: Not classified in the definition
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 and peel	0(no peel)
Pencil Hardness	JIS K 5600-5-4(pencil)、750g weight, Hardness of the pencil which does not make scar	2 H
Heat	80℃、1000 hrs. check appearance and peel off	No defect
Hot Water	Soak 72 hrs. in 60℃ hot water, check appearance and peel off	No defect
Humidity	60℃ 95%RH, 1000 hrs., check appearance and peel off	No defect
Boiling	Soak 24 hrs. in boiling water, check appearance and peel off	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 1000 back and forth, check color fade	No defect
Accelerated Light fastness	Fade meter, BP Temp. 63+/-3℃ 1000 hrs., check color fade and peel off	No defect
Accelerated Weathering	Weather-meter, BP Temp.63+/-3℃, Raining rate:18 min/120 min, 1000 hrs., check color fade and peel off	No defect

*Test conditions【IRX-HF Base ink】【Z-705 SOLVENT 5%】【160℃ 30 min】【T 350】
【XGL-HF GLASS PROMOTER 0.5%】【Substrate: Glass plate】

*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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