

FLG-HF MATT CLEAR

(Formable 2 pack type protection Matt Clear)

FLG-HF MATT CLEAR is formable clear ink with a matt finish for printing on Polycarbonate materials, treated PET, or printed ink layer. Because printed ink layer is extremely scratch-resistance, this clear can be used as a protection for ink layer, and it can also provide a matt tone design.

Applications	<ul style="list-style-type: none"> • Non-glare Matt Clear for automobile meters. • Design printing and protection of Polycarbonate materials and treated polyester film surface.
Special Features	<ul style="list-style-type: none"> • Protective Matt clear ink that prevents surface condition from changing during vacuum foaming • Halogen compounds, such as Chlorine (Cl), Bromine (Br) are not intentionally used in raw materials. • After curing, the ink layer is extremely scratch-resistance due to the balance of hardness and flexibility.
Substrate	Polycarbonate materials, treated PET
Dilution	<p>G-004 SOLVENT (STANDARD) Dilution: 5% or less</p> <p>*Usually, addition of thinner is not necessary, but use G-004 SOLVENT within 5% if necessary.</p> <p>*Do not use other solvents as they may cause and affect halogen contamination, curing, adhesion, stencil stability or other adverse effects.</p>
Catalyst/Promoter mixing	<p>200 Catalyst 10% (Standard) Pot life 3 hrs.</p> <p>*The ink will turn to gel after the pot life has expired. Be sure to mix only enough to use</p>
Recommended Cleaner	Screen Cleaner L2
Mesh	T200 mesh (Coverage would be 25m ² /kg at 200 mesh)
Drying	80°C 60 min Ensure sufficient drying
Color	<p>FLG-HF G05 MATT CLEAR: Scratch-resistant matte clear with about 0.5 gloss value</p> <p>FLG-HF WR MATT CLEAR: Scratch-resistant matte clear with improved humidity/heat resistance and weather resistance of G05</p>

Caution	<ul style="list-style-type: none"> Due to the possibilities of contamination with halogen compounds, only designated solvents and catalysts can be used. Please check the squeegee rubber, emulsion, materials and substrates before use, as they may contain halogen compounds. 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. Not suitable for outdoor exposure application Ink shelf life: 6 months from production date, unopened.
Safety	UN No.: 1210 UN Classification: Class 3 Flammable Liquids (Flash point is over 23 Degree C)
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	Results
Adhesion	JIS K 5600-5-6(Cross-cut method)、1 mm interval 6×6、cellophane tape and peel	0(No peeling)
Pencil hardness	JIS K 5600-5-4(Pencil)、500g weight, hardness of the pencil which does not make scar	4H
Heat	80°C 24hrs. Check appearance of ink layer and peel off from the substrate	No defect
Hot water	JIS K 5600-6-2、Soak 24 hrs. in 60°C warm water, check appearance of ink layer and peel off	No defect
Humidity	JIS K 5600-7-2 (Continuous condensation) , 60 °C -98 % RH 24 hrs. check appearance of ink layer and peel off	No defect
Cold	−40°C 24hrs, check appearance of ink layer and peel off	No defect
Water	24 hrs. in city water, check appearance of ink layer and peel off	No defect
Acid	7 hrs. in 5% H ₂ SO ₄ , check appearance of ink layer	No defect
Alkali	3 hrs. in 5% NaOH, check appearance of ink layer	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethanol, 500g weight, 30 back and forth. Check peel off	No defect
Oil	Soak 24 hrs. in vegetable oil, check appearance of ink layer	No defect
Detergent	Soak 24 hrs. in 10% neutral detergent, check appearance of ink layer	No defect
Artificial Sweat	Soak 24 hrs. in artificial ink, check appearance of ink layer	No defect
Scrub	Gakushin scrub tester, with cotton, 500g weight, 1000 back and forth, check color fade	No defect
Abrasion	JIS 5600-5-9 (Abrasion ring method)、1 kg weight、CS17 ring 20 rounds check exposure of under layer	No defect
Scratch	Scratch with 300g weight, check scratch on the surface	No defect
Light fastness	Fade meter, 600 hrs. exposure, check appearance of ink layer	No defect

*Test conditions 【FLG-HF G05 MATT CLEAR】 【200 Catalyst 10%】 【80°C 60min】【T 200】
【Substrate: Polycarbonate sheet (print ISX-HF 979 Black as under layer)】

*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 :2023.06.20