

## UV FIL-383 CLEAR (High Gloss UV Curable Clear)

UV FIL-383 Clear is an UV curable screen printing clear. It is an extremely flexible, highly resistant, super glossy clear with excellent leveling properties. It has outstanding adaptability to flexible materials and can be applied to a wide range of materials, including plastics.

<b>Applications</b>	Package, Poster, Books, etc.
<b>Special Features</b>	<ul style="list-style-type: none"> <li>• Applicable to a wide range of flexible materials. (Good elongation, bending, and cutting)</li> <li>• Flexible and tough, with excellent curing property and high speed printability.</li> <li>• Excellent stencil stability, solvent resistance, low odor, and low skin irritation.</li> <li>• Superior support for offset printing and solvent-based inks, with super gloss and good leveling properties.</li> </ul>
<b>Substrate</b>	<ul style="list-style-type: none"> <li>• Soft and rigid PVC, PVC stickers, PC, Paper, offset printed areas.</li> <li>• Printed area with solvent screen ink (EG, VG, 13, VK, NAN).</li> <li>• Printed area with UV curable ink (UV FIL, UF PAL).</li> </ul>
<b>Dilution</b>	Not required.
<b>Additives</b>	SM-278 DEFOAMER 1% or less (Measures to prevent foaming or repelling) SM-301 FLOW AGENT 1% or less (To improve levelling)
<b>Recommended Cleaner</b>	Screen Cleaner L2
<b>Mesh</b>	T 270 to 420 mesh (Coverage is 60 to 90m <sup>2</sup> /kg at 350)
<b>Drying/Curing</b>	Accumulated energy: about 180mJ/cm <sup>2</sup> , Peak power:225mW/cm <sup>2</sup> (Eye Graphics UV integral light counter) Two 80W/cm Metal halide lamps, lamp height 15 cm, belt speed 15m/min
<b>Caution</b>	<ul style="list-style-type: none"> <li>• Checking adhesion before production: Adhesion may change depending on the substrates, processes, and printing. Be sure to check the adhesiveness before mass production printing.</li> <li>• Do not use for printed materials to be placed inside optical disc packages such as CDs and CD-Rs.</li> <li>• Ink shelf life: 12 months from production date, unopened.</li> </ul>
<b>Safety</b>	UN No.: 3082 UN Classification: Class 9 Environmentally Hazardous Substances

## 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
Pencil Hardness	JIS K 5600-5-4 (pencil), Weight 750g, hardness which does not make scar.	6B or below
Heat	80°C 72 hrs. leave 1 hr., check appearance and peel off	No defect
Hot Water	Soak 72 hrs. in 50°C hot water, leave 1 hr., check appearance and peel off.	No defect
Humidity and cool-heat cycling test	10 cycles, 80°C 4 hrs. ~25°C 1 hr. ~-20°C 4 hrs. ~25°C 1 hr. check appearance and peel off	No defect
Boiling Water	98°C after soak for 5 mi, check appearance and peel off	No defect
Water	Soak 240 hrs. in tap water, check appearance and peel off	No defect
Acid	Soak 7 hrs. in 5% HCl solution, check appearance	No defect
Alkaline	Soak 7 hrs. in 5% NaOH, check appearance	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethyl alcohol, weight 500g, 200 back and forth, check peel off	No defect
Gasoline	High octane gasoline, weight 500g, 100 back and forth	No defect
Solvent	Gakushin scrub tester, cotton soaked ethyl acetate, weight 500g, 10 back and forth, check peel off	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 1000 back and forth, check color fade	No defect
Elongation (%)	Tensilon, 15 mm X 100 mm sheet	10.0→12.5cm
Bend	Best tester, condition of no crack in printed ink layer after 180 degree bending.	2mm or less
Punching	Punching by press machine	No defect
Blocking	Weight 200g/cm <sup>2</sup> , 60°C 100 hrs.	No defect
Tensile strength	Tensilon STM tensile tester	2.4kg
Accelerated Weathering	Weather meter, BP temp. 63+/-3°C Raining rate 18 min/120 min, check color fade and appearance	(400~600 hrs.) No defect

\*Test condition 【80W/cm<sup>2</sup> Metal halide lamps, Height 15 cm, Belt speed 10m/min】  
【Substrate: PVC sticker (on VK ink)】 【T 300】

\*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 :2022.02.10.