## Ti Teikokulnk Product Information

## **UV SPS-5300 CLEAR**

(UV curable weather resistance clear)

UV SPS-5300 CLEAR is an UV curable clear for screen printing. It is particularly good in weather resistant and resistant, and can be used as an overcoat clear for outdoor use. It is a clear with high gloss, good leveling, flexibility, and transparency.

Applications	PVC stickers for outdoor use	
Special Features	<ul> <li>Weather resistance clear on soft &amp; rigid PVC, PC, Paper, various offset printing and VK inks.</li> <li>Suitable for applications where yellowing is not preferred, solvent resistance, and chemical resistance are required.</li> <li>Non-silicon type with excellent transparency</li> </ul>	
Substrate	<ul><li>PVC stickers</li><li>On solvent type screen ink (VK)</li></ul>	
Dilution	Not required in general use (Use RE-804 REDUCER within 5% if dilution is needed)	
Catalyst/Promoter mixing	Not required	
Additives	SM-257 DEFOAMER Less than 2% (if bubbling or cissing occurs)	
Recommended Cleaner	Screen Cleaner L2	
Mesh	T 250 to 420 mesh (Coverage is about 60 to 90m²/kg)	
Drying/Curing	Accumulated light energy: 180 to 300mJ/cm², Peak power: 225mW/cm² (Eye Graphics UV integral light counter) Two 80W/cm metal halide lamps, lamp height 15cm, belt speed 8 to 15m/min	
Caution	<ul> <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>Since this product uses a non-silicone defoamer, please note that cissing may occur when printing over inks that use silicone defoamer.</li> <li>Ink shelf life: 12 months from production date, unopened.</li> </ul>	
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	1mm square, 90 degree peel test with cellophane tape	100/100
Elongation (%)	Tensilon STM tension tester, tensile test of 25mm×100mm sheet	38%
Tensile	Tensilon STM tension tester, tensile test of 10mm×100mm sheet	1.8kg/10mm
Cool-heat cycle test	80°C4hrs, 25°C1hr, -40°C4hrs, 25°C1hr, 10 cycles, check appearance and adhesion	No defect
Dimensional change on heating	Measure dimensional change of right angle cut 100×100mm printed material before and after heating at 80°C for 48 hrs.	≦0.1%
Heat aging	80°C、after 400 hrs. check appearance and adhesion	
Humidity	60°C、98% RH, 400 hrs. check appearance and adhesion	No defect
Hot Water	Soak 400 hrs. in 40°C hot water, check appearance and adhesion	
Boiling Water	Soak 5 min in 98 °C boiling water, check appearance	
Engine oil	Soak 1 hr., check appearance	
Kerosene	Soak 1 hr., check appearance	
Gasoline	Soak 30 min in hi octane gasoline, check appearance	
Window Washer	Soak 1 hr., check appearance	No defect
WAX REMOVER	Soak 1 hr., check appearance	
Break oil	Soak 1 hr., check appearance	
LLC (anti-freezing liquid)	Soak 1 hr., check appearance	
Acid	Drop 0.5 cc of 0.1N HCL, check appearance after 24 hrs.	No defect
Alkali	Drop 0.5 cc pf 0.1N NaOH, check appearance after 24 hrs.	No defect
Abrasion 1	Taber test, CS10 eraser, weight 500g,100 turns, check appearance	No defect
Abrasion 2	Gakushin tester, cotton, weight 500g, 1000 back and forth, check appearance	No defect
Abrasion (Gasoline)	Gakushin tester, cotton soaked high octane gasoline, weight 200g, 100 back and forth, check appearance	No appearance defect
Abrasion (LLC)	Gakushin tester, cotton soaked LLC, weight 200g, 100 back and forth, Check appearance	No appearance defect
Abrasion (Window Washer)	Gakushin tester, cotton soaked window washer, weight 200g, 100 back and forth, check appearance	No appearance defect
Drying	Just after UV drying, finger touch observation	No tack
Blocking	Weight 200g/cm²、60°C, 100 hrs., put back sides together, blocking test	No appearance defect
Weathering	Weather meter, 2000 hrs.	No defect

<sup>\*</sup>Test Conditions [VK white and black ink printed on PVC sticker and overcoated][T 300 mesh] [80W/cm Two metal halide lamps, 15cm height, belt speed 8m/min]

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<sup>\*</sup>Above resistance test results are measured results in our laboratory and they are not quaranteed values.

<sup>\*</sup>Information contained in this catalog may change without prior notice.