

## UV SPS-5200 CLEAR

(UV curable weather resistance clear)

UV SPS-5200 CLEAR is an UV curable clear for screen printing that is flexible and highly resistant. It is a high-gloss clear with good leveling properties. It has excellent adaptability to PVC stickers, which require weather resistance.

<b>Applications</b>	PVC stickers for outdoor use	
<b>Special Features</b>	<ul style="list-style-type: none"> <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> </ul>	
<b>Substrate</b>	<ul style="list-style-type: none"> <li>• Soft &amp; Rigid PVC, PC, Paper,</li> <li>• On offset printing</li> <li>• On solvent type screen ink (VK)</li> </ul>	
<b>Dilution</b>	Not required in general use (Use RE-804 REDUCER within 5% if dilution is needed)	
<b>Catalyst/Promoter mixing</b>	Not required	
<b>Additives</b>	SM-278 DEFOAMER	Less than 1% (If bubbling or cissing occurs)
	SM-301 FLOW AGENT	Less than 1% (to improve leveling)
<b>Recommended Cleaner</b>	Screen Cleaner L2	
<b>Mesh</b>	T 250 to 420 mesh (Coverage is about 60 to 90m <sup>2</sup> /kg)	
<b>Drying/Curing</b>	Accumulated light energy: 180 to 300mJ/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 15cm, belt speed 8 to 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>• Ink shelf life: 12 months from production date, unopened.</li> </ul>	
<b>Safety</b>	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.
- 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	80°C 72 hrs. leave 1 hr. check appearance, adhesion, and size	No defect
Hot Water	Soak 72 hrs. in 50°C hot water, leave 1hr, check appearance, adhesion, and Size	No defect
Boiling Water	98°C check appearance of ink layer after 5 min.	No defect
Cool-heat cycling test	80°C4 hrs.→25°C 1hr.→-20°C 4hrs.→25°C 1hr. 10 cycles, check appearance and adhesion	No defect
Pencil Hardness	JIS K-5400	H~2H
Punching	Cut with a punch, check cut edges.	No defect
Elongation	Tensilon STM tension tester,Tensile test 15mm X 100mm sheet	30%
Bending	Best tester, condition of no crack in printed ink layer after 180 degree bending.	2mm or less
Acid	Soak 7 hrs. in 5% HCl, check appearance and adhesion (25°C)	No defect
Alkaline	Soak 7 hrs. in 5% NaOH, check appearance and adhesion (25°C)	No defect
Gasoline	Gakushin scrub tester, cotton soaked high octane gasoline, weight 500g, 100 back and forth, check appearance	No defect
Alcohol	Gakushin scrub tester, cotton soaked ethanol, weight 500g, 200 back and forth, check appearance	No defect
Solvent	Gakushin scrub tester, cotton soaked ethyl acetate, weight 500g, 10 back and forth, check appearance	No defect
Scrub	Gakushin scrub tester, cotton, weight 500g, 1000 back and forth	No defect
Blocking	Weight 200g/cm <sup>2</sup> . 60°C 100 hrs. put printed sides together	No defect
Weathering	Weather meter, 2000 hrs	No defect
Light fastness	Fade meter,1000 hrs.	No defect

\*Test Conditions 【VK ink printed on PVC sticker and overcoated】 【T 300 mesh】

【80W/cm Two metal halide lamps, 15cm height, belt speed 8m/min】

\*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.