

SP-3100AU CLEAR

(Overcoat Clear for PVC stickers)

SP-3100AU CLEAR is an isocyanate-hardening, urethane-type clear, developed as overcoat clear for screen printing of Teikoku VK ink. It is a two pack curing type clear with excellent gloss, weather resistance and resistances.

Applications	<ul style="list-style-type: none"> • Sticker Overcoat clear for fleet marking of cars and motorcycles. Overcoat clear for highly weather resistance PVC sticker for outdoor signboards.
Special Features	<ul style="list-style-type: none"> • Gloss clear with excellent weather resistance and drying and curing is faster than “SP-2100AU CLEAR”. • Good balance of hardness and softness, excellent in various types of resistances. • Superior adhesion to PVC stickers. • Pot life is longer than 8 hrs.
Substrate	PVC
Dilution	Z-704 SOLVENT (standard) Dilution: 10 to 20%
Catalyst/Promoter mixing	210 CATALYST 13% (standard) Pot life : 8 to 10 hrs. *The ink will turn to gel after the pot life has expired. Be sure to mix only enough to use
Recommended Cleaner	Screen Cleaner L2
Mesh	T 180 to 225 mesh (Coverage would be about 25 to 35m ² /kg at 200 mesh)
Drying	60°C 60 min *After drying at 60°C for 1 hr., leave on a rack for about 15 hrs. before stacking. *Application tape should be applied after drying at 60°C for 1 hr. and after another 48 hrs.
Caution	<ul style="list-style-type: none"> • 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. • To confirm curability, conduct an alcohol resistance test after printing and heat drying. • Insufficient drying and excess or deficiency of Catalyst can be checked. Resistance lasts 15 to 20 times immediately after heating, more than 50 times when complete drying. • Ink shelf life: 24 months from production date, unopened.
Safety	UN No.: 1210 UN Classification: Class 3 Flammable Liquids (Flash point is over 23 Degree C)

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
Heat	JIS K5600-6-3:ISO 3248: 80°C 168 hrs, check appearance and peel off from the substrate	No defect
Hot Water	JIS K 5600-6-2: ISO 2812-2, Soak 168 hrs. in 40°C hot water, check appearance and peel off from the substrate.	No defect
Humidity and cool-heat cycling test	JIS K5600-7-4, 3 cycles:80°C(4.5H)~20°C(0.5H)~-30°C(4H)~20°C(0.5H)~50°C 95%RH(14H)~20°C(0.5H) ,check appearance and peel off from the substrate	No defect
Boiling	Soak 5 min in boiling water, check appearance and peel off from the substrate	No defect
Acid	7 hrs. in 5% H ₂ SO ₄ , check appearance and peel off from the substrate	No defect
Alkali	7 hrs. in 5%NaOH, check appearance and peel off from the substrate	No defect
Alcohol	Soak 30 min in ethanol, check appearance	No defect
Oil	Soak 7 hrs. in engine oil, check appearance and peel off from the substrate	No defect
Detergent	Soak 1 hr. in neutral detergent, check appearance	No defect
Window washer	Soak 1 hr. in window washer, check appearance	No defect
Wax remover	Soak 30 min in wax remover liquid, check appearance	No defect
Gasoline	Gakushin scrub tester, weight 200g, 300 back and forth, check appearance	No defect
Kerosene	Soak 1 hr in Kerosene, check appearance	No defect
Scrub	Gakushin scrub tester, cotton, weight 200g, 1000 back and forth, check color fade	No defect
Abrasion	JIS K5600-5-9:ISO7784-2 (Abrasion ring method) : 500g weight, SC17 ring, 100 rounds, check substrate	No defect
Elongation (%)	Tensilon: 15mm×100mm sheet, tension test at 300mm/min	130%
Tensile Strength	Tensilon : 15mm×100mm sheet, tension test at 300mm/min	2.0kg/15mm
Shrink by heat	Store 100×100mm prints for 48 hrs. at 80°C, check size change: ≤0.1%	No defect
Accelerated Weathering (carbon arc)	JIS K5400 9.8.1 Weather meter with carbon arc, :BP temp. 63+/-3°C : Raining rate: 18 min/120 min, check color fade and peel off	2000 hrs. No defect
Natural weathering	JISK5600-7-6、 24 months exposure in Florida, check color fade and peel off	No defect

*Test condition 【SP-3100AU CLEAR】 【210 CATALYST 13%】 【Z-704 SOLVENT 15%】
【60°C 60 min】 【T 180】 【Substrate: PVC sticker(Hi-S Cal 5010 white)】
【Tested by overcoating on VK-911 Black, 391 Blue, and Silver printed material】

*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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