## **Treikokulnk Product Information**

## SP-5110 AU CLEAR (Overcoat Clear for PVC stickers)

SP-5110AU CLEAR is an isocyanate curing urethane type clear, developed as overcoat clear for screen printing of Teikoku VK ink. It is 2 pack curing clear and has excellent gloss and resistances including weather resistance. It is ideal as overcoat clear for PVC stickers used in automobiles and motorcycles and so on.

Applications	<ul> <li>Overcoat clear for fleet marking of automobiles and motorcycles, etc.</li> <li>Overcoat clear for highly weather resistance PVC sticker for outdoor signboards.</li> </ul>
Special Features	<ul> <li>Gloss clear with superior resistance to SP-3100 AU Clear</li> <li>Excellent adhesion to PVC stickers.</li> <li>Longer pot life, it lasts about 8 hrs.</li> </ul>
Substrate	PVC
Dilution	Z-704 SOLVENT (standard) Dilution: 10 to 15%
Catalyst/Promoter mixing	<ul> <li>210 CATALYST 13% (standard) Pot life : 8 hrs.</li> <li>*The ink will turn to gel after the pot life has expired. Be sure to mix only enough to use</li> </ul>
Recommended Cleaner	Screen Cleaner L2
Mesh	T 150 Mesh (Coverage would be about 15 to 25 $m^2/kg$ ink is used at 150 Mesh)
Drying	<ul> <li>70°C 90 min</li> <li>* If residual solvent remains on the ink or film, adhesion and resistance may be deteriorated, so it is necessary to cure and dry the ink and films sufficiently to avoid residual solvent. 70°C for 90 minutes dry is recommended.</li> <li>* Stack the printed matters after drying for 90 minutes at 70°C and leaving them for 15 hours.</li> <li>* Apply application tapes after drying the printed matters for another 24 hours.</li> </ul>
Caution	<ul> <li>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.</li> <li>Ink shelf life: 24 months from production date, unopened.</li> <li>Mix ink enough before use to avoid defoamer separating over time.</li> </ul>

Safety	UN No.: 1210 UN Classification: Class 3 Flammable Liquids (Flash point is over 23 Degree C)
Handling	<ul> <li>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.</li> <li>Containers should be closed tightly after use and stored in a cool and dark place.</li> <li>SDS is available upon request. Please request a copy and read it carefully before handling the products.</li> </ul>

## Resistance

Test item	Test Conditions	Test results
Heat	80°C,168hrs, check the appearance and peeling of the printed ink layer	No defect
Hot Water	JIS K5600-6-2, Soak 168hrs in 40°C water, check the appearance and peeling of the printed ink layer	No defect
Boiling water	Soak 5 min in boiling water, check the appearance and peeling of the printed ink layer	No defect
Acid	7hrs in 5% of $H_2SO_4$ , check the appearance of the printed ink layer	No defect
Alkali	7hrs in 5% of NaOH, check the appearance of the printed ink layer	No defect
Alcohol	Soak 30min in ethanol, check the appearance of the printed ink layer	No defect
Oil	Soak 7hrs in engine oil, check the appearance of the printed ink layer	No defect
Detergent	Soak 1hr in neutral detergent, check the appearance of the printed ink layer	No defect
Window washer	Soak 1hr in window washer, check the appearance of the printed ink layer	No defect
Gasoline	Gakushin scrub tester, weight 200g, back and forth 300 times, check the appearance of the printed ink layer	No defect
Scrub	Gakushin scrub tester, cotton, weight 200g, back and forth 1000 times, check the color fade of the printed ink layer	No defect
Accelerated Weathering	Weather meter, BP temp 63+/-3°C, raining rate: 18 min/120 min, check the color fade and peeling of the printed ink layer	2000hrs no defect

\*Test condition [SP-5110 AU CLEAR] [210 CATALYST 13%] [Z-704 SOLVENT 15%] [70°C 90 min] [T 150] [Substrate: PVC sticker]

[Tested by overcoating on VK-911 Black 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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