

UV MET Ink series (UV Curable Ink)

UV MET is a UV curable screen ink with excellent adhesion and durability developed for metals such as aluminum and stainless steel. It can be applied to a wide range of metals.

Applications	Metal name plate			
Special Features	<ul style="list-style-type: none"> • Excellent adhesion, surface hardness, abrasion resistance, chemical resistance, and solvent resistance. • Low odor, low skin irritation and a glossy finish 			
Substrate	Aluminum, stainless steel, steel, zinc, ceramics, and plated metals.			
Dilution	Not required (If required, use RE-805 REDUCER less than 5%)			
Catalyst/Promoter mixing	SM-422 ADDITIVE 3 to 5% Pot life: 1 to 2 weeks *Be sure to use SM-422 ADDITIVES to ensure adhesion and various resistances.			
Additives	SM-269 DEFOAMER 0 to 1% (If foaming or cissing occurs) SM-301 FLOW AGENT 0 to 1% (If surface leveling improvements are needed)			
Recommended Cleaner	<ul style="list-style-type: none"> • Screen Cleaner L2 • Applicable to machine cleaning with less hazardous glycol ether types (Glycol ether type cleaning may not be suitable for some types of stencil emulsions, so please be sure to test it beforehand.) 			
Mesh	T 300 to 380 mesh (Coverage is 60 to 90m ² /kg)			
Drying/Curing	Accumulated energy: 500 to 600mJ/cm ² , Peak power:400mW/cm ² (Eye Graphics UV integral light counter) A rough standard: Two 80W/cm Metal halide lamps, lamp height 15 cm, belt speed 5m/min			
Standard Colors	012 EXTENDER	182 RED	391 BLUE	797 GREEN
	121 SCARLET	190 BRIGHT RED	581 MAGENTA	821 VIOLET
	163 RED	221 YELLOW	611 WHITE	911 BLACK
	177 OPAQUE RED	263 REDDISH YELLOW	616 WHITE	
Caution	<ul style="list-style-type: none"> • Checking adhesion before production: Adhesion may change depending on the substrates, processes, and printing. Be sure to check the adhesiveness before mass production printing. • Ink shelf life: 12 months from production date, unopened 			

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	JIS K 5600-5-6 (cross-cut), cellophane tape and peel	0 (no peel)
Pencil Hardness	JIS K 5600-5-4 (pencil), Weight 750g, hardness which does not make scar.	2H
Heat	80°C 72 hrs. check for appearance and peel off.	No defect
Hot Water	Soak 72 hrs. in 50°C hot water, check appearance and peel off	No defect
Humidity and cool-heat cycling test	10 cycles, 80°C(4hrs.)~25°C(1hr)~-20°C(1hr)~25°C(1hr) Check appearance and peel off	No defect
Humidity	60°C 97%RH 240 hrs. check appearance and peel off	No defect
Water	Soak 240 hrs. in tap water, check appearance and peel off	No defect
Acid	24 hrs. in 5% HCl, check appearance	No defect
Alkali	24 hrs. in 5% NaOH, check appearance	Surface slightly dulled
Alcohol	Gakushin scrub tester, cotton soaked ethanol, weight 500g, 100 back and forth, check peel off	No defect
Gasoline	Gakushin scrub tester, cotton soaked high octane gasoline, weight 500g, 100 back and forth, check appearance	No defect
Scrub	Gakushin scrub tester. Cotton, weight 500g, 1000 back and forth, check color fade	No defect
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 ² 60°C 100 hrs.	No defect
Falling-weight test	Dupont Impulse Tester, drop 300g weight, from 50cm height	No defect
Multi-printing	5 colors multi-printing, check appearance and adhesion	No defect
Accelerated Weathering	Weather meter (carbon arc), BP temp. 63+/-3 °C, raining rate 18 min/120min, check color fade and peel off	(More than 500 hrs.) No defect

*Test condition 【80W/cm² Metal halide lamps, height 15cm, belt speed 5m/min】
 【T 350】 【Substrate: 0.5mm aluminum plate】

*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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