

English Version (Japanese Translation)Post-Order Production

screen ink

Reactive ink

general printing | Two-component reaction type

APG Ink

This is a high-performance two-component reactive ink made of acrylicurethane resin, developed especially for outdoor applications where weather resistance and durability are required.

Product Features

- The use of the finest pigments ensures excellent weather resistance.
- The gloss is excellent.
- It has excellent chemical resistance, including resistance to alcohol and gasoline.

Endurance

Chemical resistance

solvent resistance

alcohol resistance

Gasoline resistance

Physical Endurance

Durability

weather resistance

Recommended Printed Materials

Material

engineering plastic

Modified Polyphenylene Ether [PPO/PPE]

Heat-resistant engineering plastic

Painted surface

Painted metal

Acrylic Coated Metal

Thermosetting Acrylic Coated Steel Sheet

Polyurethane-coated metal

Polyurethane-coated steel sheet

Surfaces treated with metal, glass, ceramics, and hard coatings

metallic base

plated surface

metal-plated surface

thermosetting resin

Hard Coat Treatment Surface

Hard coated plastic

Finish, Texture, and Visual Effects

finish

gross

Color & Grade

Standard Colors (Standard Colors)

00 Medium

01 White

16 Pink

25 Purple

28 Orange

45 Dark Blue

46 Blue

75 Green

Standard Colors (Weather-Resistant Colors)

13 Qing Huang

14 Red and Yellow

18 Red

38 Red

Specifications

Lotus form
1kg Ink Can

How to use

- For every 100 parts of ink, add 10 parts of curing agent JA-950 and 5~20 parts of diluent solvent, stir well, and print after thorough mixing.
- Please use Tetron solvent (standard, slow-drying, retarder) as the diluting solvent.
PC solvents can also be used.
- Pot life is 6~12 hours (25° C).

print edition

Types of Editions

photographic plate

Cleaning

Vinyl cleaning solvent

Curing Method & Conditions

- After printing, it is promptly dried at room temperature.
- Baking is necessary to impart adhesion and weather resistance.
Please bake at 120° C for at least 15 minutes.
The coating performance varies depending on baking conditions.

Test data (environment, physical properties, weather resistance, performance, etc.)

Conditions

base material	Thermosetting Acrylic Coated Steel Sheet
Ink	APG Red
baked in	120° C for 15 minutes

Results

Test Items	Test Method	Results
Adhesion	Cross-Cut Cellotape Release Test	100/100 Passing
Coating hardness	JIS K5400 8.4 Pencil Scratch Test	3H~4H
impact resistance	JIS K5400 8.3.2 DuPont Impact Test Φ 1/2 inch, 500g, 20cm	No cracks or peeling of the paint film
solvent resistance	Lacquer Thinner Rubbing Test MIBK : Acetic ethyl : Toluene = 1:1:1	25 times
	Xylene rubbing test	Over 50 times
	Methanol Rubbing Test	Over 100 times
	Gasoline: 1 hour steep	No abnormalities
abrasion resistance	1000 tests on dry cloth of the Oscillature-type abrasion tester	No abnormalities
heat resistance	JIS K5400 8.13, 180° C 30 min	No abnormalities
cold resistance	-30° C, 48 hours	No abnormalities
water resistance	JIS K5400 8.19, 40° C underwater for 14 days	No abnormalities
moisture resistance	Humidity above 95%, 50° C, 14 days	No abnormalities
boiling water resistance	Boiling water, 1 hour	No abnormalities
detergent resistance	Mama Lemon [Lion Product] 5% Solution, 24-hour soaking	No abnormalities
oil resistance	Motor Oil [Honda Ultra S] 24-hour soaking	No abnormalities
Cleaner resistance	Magicclean [Kao Product] 6-hour soaking	No abnormalities
Alkali resistance	5% NaOH soaked for 6 hours	No abnormalities
acid resistance	5% H ₂ SO ₄ soaked for 6 hours	No abnormalities
saltwater resistance	Soak in 5% brine for 14 days	No abnormalities
weather resistance	Sunshine Weather-o-Meter 1000 hours	No abnormalities

Weather Resistance List

Grade	color name
7	white
7-8	green and yellow reddish yellow orange Red red pink purple
8	dark blue blue Green Black Medium

- The immersion test was conducted at room temperature.
- Depending on the type of painted steel sheet, the results may differ from those shown above.
- When ink is diluted with medium or white ink for printing, its weather resistance drops significantly compared to the primary colors.

Notes

- Since hardeners react with moisture and harden, always keep containers closed.
When storing, seal tightly and keep in a cool, dark place.
- For applications where weather resistance is not required, we use the same series of "2000 Series AP Inks" and epoxy-based
"1000 Series Epilite Ink" is available.
- Because only the finest pigment colors are set, yellow, gold-red, light green onions, and ultramarine are not included as standard colors.
However, these colors can be easily created with simple color mixing, so please try the following combinations as needed.
 - Yellow = 90% Blue-Yellow + 10% Red-Yellow
 - Gold Red = Orange 80% + Red 20%
 - Asagiri = White 70% + Blue 30%
 - Ultramarine = Dark Blue 80% + Purple 20%
- For safety precautions when using the product, please refer to the product's Safety Data Sheet (SDS).
- The contents provided in this information may be changed or revised without prior notice.
- This characteristic data is based on the evaluation results conducted by our company and does not guarantee the product's characteristics during customer use.
- When using the device, please thoroughly consider the conditions based on the evaluation results of the equipment and substrate actually being used.