

English Version (Japanese Translation)

screen ink

Reactive ink

general printing | Two-component reaction type

Epilight 1000 Series

This is an epoxy resin-based two-component reaction ink.
It has extremely strong adhesion, making it ideal for printing on materials that other inks do not bond.

Product Features

- It has a high-gloss type with outstanding adhesion.
- High concentration, thick film type with excellent concealing power.
- This is a high-viscosity, high-thixo type ink that emphasizes print reproducibility.
- It is highly resistant to oil, gasoline, alcohol, and chemicals.
- All colors are lead-free. No lead pigments are used.

Features

concealment

bendability

flexibility

Adhesion

physical strength

lead-free

Endurance

Chemical resistance

solvent resistance

alcohol resistance

Gasoline resistance

oil resistance

Recommended Printed Materials

Material

olefin-based

Treated Polypropylene [PP]

Processed PP molded products

Painted surface

Painted metal

Coated metal sheet

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

metallic base

glass

Ceramic

thermosetting resin

Finish, Texture, and Visual Effects

finish

gross

Color & Grade

Standard Colors (Standard Colors)

 00 Medium

 01 White

 08 Red

 12 Yellow

 25 Purple

 28 Orange

 46 Blue

 75 Green

 86 Ultramarine

Standard Colors (Weather-Resistant Colors)

 06 Cinnabar

 13 Qing Huang

 18 Red

Surface Decoration Clear

Medium

Base for adjusting ink color density and mixing special colorants such as gold and silver powders.

Can also be used for overcoats and undercoats.

For gloss-type inks.

[Features] FC Medium

Good leveling and transparency.

Specifications

Lotus form

1kg Ink Can

Accessories

Hardening agent (400g can)

How to use

- Add curing agents and diluent solvents to the ink, stir well, and print.
 - Hardener: 20~30 parts
 - Dilution solvent: Epilite solvent, small amount
 - When the hardener ratio is high, flexibility and flexibility improve.
When the hardener ratio is low, hardness, scratchability, and chemical resistance improve.
- When heat curing is applied, the physical properties of the coating improve.
- When printing on inorganic materials such as glass or metal, add 1~2% additive JA-1000.
Adhesion and physical properties are significantly improved.
- The usable time is 5~6 hours at 20° C and 2~3 hours at 30° C.

print edition

Types of Editions

photographic plate

Cleaning

Epilite Cleaning Solvent

Recommended Printing Film Thickness

ultra-thick

Curing Method & Conditions

Evaporative Drying Conditions

Dry fingertips

- Temperature 20° C: 2 hours
- Temperature 80° C: 10 minutes
- Temperature 100° C: 5 minutes
- Temperature 120° C: 3 minutes

hardening drying

- Temperature 20° C: 24 hours
- Temperature 80° C: 20 minutes
- Temperature 100° C: 10 minutes
- Temperature 120° C: 6 minutes

fully cured

- Temperature 20° C: 5~10 days
- Temperature 80° C: 60 minutes
- Temperature 100° C: 30 minutes
- Temperature 120° C: 15 minutes

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

Conditions

base material	Aluminum plate
Ink Blend	100 parts ink, 20 parts curing agent
Thermal hardening	100° C for 30 minutes

Results		
Test Items	Test Method	Results
Adhesion	Cross-Cut Cellotape Release Test	100/100 No peeling
hardness	JIS K5400 8.4 Pencil Scratch Test	3H~4H
impact	JIS K5400 8.3.2 DuPont Impact Test Φ 1/2 inch, 500g, 50cm	No abnormalities
Elyxene value	JIS K5400 8.2 Elixiner 6mm Φ	No abnormalities
flexion resistance	JIS K5400 8.1 Flex Resistance 2mm Φ	No abnormalities
weather resistance	45° south outdoor exposure	After 4 months, the shine fades.
water resistance	tap water Soak for 1 month	No printing film abnormalities Adhesion decreases
boiling resistance	boiling water 2-hour immersion	No printing film abnormalities Adhesion decreases
Salt water spray resistance	5% salt solution for 200 hours	No abnormalities
acid resistance	10% hydrochloric acid solution, soaked for 24 hours	No abnormalities
Alkali resistance	10% NaOH 24-hour soaking	No abnormalities
alcohol resistance	Wipe 200 times with ethanol on a cloth	No abnormalities
ethyl acetate resistance	After 6 hours of dripping	No abnormalities
Gasoline resistance	24-hour immersion in gasoline	No abnormalities

Weather Resistance List

Grade	color name
6	1000 Medium
	1001 White
	1006 Golden Red
	1008 Red
	1012 Yellow
	1013 Qing Huang
	1018 Red
	1025 Purple
	1028 Orange
	1046 Blue
	1075 Greens
	1086 Ultramarine
	1090 Black

- When ink is diluted with medium or white ink for printing, its weather resistance drops significantly compared to the primary colors.

Notes

- Since hardeners and additives react with moisture and harden, always keep the container closed.
When storing, seal tightly and keep in a cool, dark place.
- Medium and white inks may turn slightly yellow when cured above 120° C.
- Epilite ink has poor weather resistance, and if printed materials are left outdoors, the printed surface will become dusty within a few months.
(Choking phenomenon)
If this becomes an issue, you may need to use 'APG ink' or 'slow-drying MIG-N ink',
Use inks with good weather resistance.
- 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.