

English Version (Japanese Translation)

screen ink

Evaporative Drying Ink

general printing | Evaporative drying type

EXG Ink 3500 Series

This is a vinyl-based glossy ink with excellent printing performance and blocking resistance.

Product Features

- It is resistant to clogging on the plate and excels in high-speed printing.
- It is highly resistant to alcohol, gasoline, oil, and chemicals.
- It offers excellent flexibility and excellent blocking resistance.
- Does not contain harmful substances such as heavy metals.
- It features minimal spacing during molding.
- Suitable for dummy cans and other molding purposes.
- Because it dries slowly, there is no worry about clogging even when printing fine patterns.
- In addition to standard colors, weather-resistant colors (weather-resistant blue-yellow, weather-resistant red-yellow, weather-resistant gold red, weather-resistant red) are available.
- As special products, we offer DH white and black (for molding).

Features

High-speed printability

flexibility

Endurance

solvent resistance

alcohol resistance

Gasoline resistance

oil resistance

Physical Endurance

blocking resistance

Recommended Printed Materials

Material

paper

coated paper

Vinyl

Soft Vinyl [PVC]

Rigid Vinyl [PVC]

Vinyl sticker

PVC Sticker

General plastic

Acrylonitrile Butadienestyrene [ABS]

Polycarbonate [PC]

polyester-based

Amorphous Polyethylene Terephthalate [PET]

A-PET

Painted surface

Painted metal

Polyurethane-coated metal

PVC steel sheet

Finish, Texture, and Visual Effects

finish

gross

Color & Grade

Standard Colors (Standard Colors)

 00 Medium	 01 White	 02 Yellow	 03 Green and Yellow	 05 Gold Red	 08 Red	 16 Pink	 17 Red
 25 Purple	 28 Orange	 35 Asa Leek	 45 Dark Blue	 46 Blue	 75 Green	 85 Ultramarine	

Standard Colors (Weather-Resistant Colors)

 06 Cinnabar	 13 Qing Huang	 14 Yellow	 14 Red and Yellow	 18 Red	 38 Red	 87 Ultramarine
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DH color

 white	 Black
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Specifications

Lotus form

1kg Ink Can

How to use

- Dilute the ink with EXG solvent (standard, slow-drying, retarder) before use.
- When printing on soft vinyl, use EXG quick-drying solvent.
- When printing on polycarbonate material, use PC solvent.

print edition

mesh	Cleaning
200~300	Vinyl cleaning solvent

Curing Method & Conditions

This is when diluted 20% at EXG standard (room temperature 20° C).
Forced drying with jet dryers and similar tools shortens drying time.

Evaporative Drying Conditions

- completely dry**
- Soft vinyl, vinyl stickers: 5~10 minutes
 - Rigid vinyl, polycarbonate: 10~30 minutes

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

Conditions	
base material	polycarbonate sheet
printing	Three reprints, print order: 3508 Red, → 3590 Black, → 3507 White
diluent solvent	EXG Standard Solvent
print edition	250 mesh Tetron version

Results		
Test Items	Test Method	Results
dry	Dilute 3501 white by 20% with EXG standard solvent Printed on polycarbonate sheets using T-250 plates	• Dry fingertips ◦ 22° C 4 minutes 30 seconds ◦ 60° C 1 minute 00 seconds • completely dry ◦ 22° C, 90 minutes ◦ 60° C 5 minutes
Adhesion	Cross-Cut Cellotape Release Test	100/100 No peeling
impact resistance	JIS K5400 8.3.2 DuPont Impact Test Φ 1/2 inch, 500g, 50cm	No cracks or peeling of the paint film
pencil hardness	JIS K5400 8.4 Pencil Scratch Test	H
heat resistance	JIS K5400 8.13 80°C 24hr	No change in the appearance of the paint film
cold resistance	-30°C 24hr	No change in the appearance of the paint film
water resistance	JIS K5400 8.19 30° C underwater 24hr	No change in the appearance of the paint film
moisture resistance	40° C, 95° C, 16 hours, → room temperature, 8 hours, perform 3 cycles	No change in the appearance of the paint film
Resistant to thermal cycles	100° C 2.5hr → Room temperature 1hr → -30° C 2.5hr → Room temperature 2hr Perform 4 cycles totaling 8 hours	No cracks or peeling of the paint film
weather resistance	Sunshine Weather Meter 600hr	No change in the appearance of the paint film
solvent resistance	Rub 50 times with solvent	99% Ethanol: No changes to the appearance of the paint film 99% methanol: No change in the appearance of the coating film
blocking resistance	Printed surface size: 10cm ² , 50° C, 3Kg, 60 minutes	Do not block
abrasion resistance	Eraser [Lion] 100 rubs	No scratches or peeling

Weather Resistance List

Grade	color name
4-5	3517 Red
5	3502 Yellow 3503 Qing Huang 3505 Kin-Chi
6	3518 Red 3585 Ultramarine
6-7	3513 Qing Huang 3514 Yellow
7	3500 Medium 3501 White 3508 Red 3535 Light Green
7-8	Weather-resistant white 3506 Golden Red 3516 Rose 3525 Purple 3528 Orange
8	Weather Resistance Green-Yellow Weathering: Red-yellow Weather-tolerant Jin Chi Weather-resistant red 3538 Red 3545 Dark Blue 3546 Blue 3575 Green 3587 Gunqing 3590 Black

- Weather resistance varies depending on the color.
Be especially careful as smoke and light colors perform significantly lower than their primary colors.

Notes

- For applications requiring advanced weather resistance, such as automotive exterior stickers, use light-resistant colors of grade 7~8 or higher.
- 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.