

English Version (Japanese Translation)

screen ink

Evaporative Drying Ink

general printing | Evaporative drying type

OPS Ink 5600 Series

This is an evaporative drying type
glossy ink developed for printing on rigid polyolefin materials such as PP sheets, offering excellent
weather resistance.

Product Features

- It has excellent adhesion to polyolefin materials.
- The ink film is tough and highly wear-resistant.
- It excels in oil resistance, alcohol resistance, and chemical resistance.
- It excels in weather resistance, water resistance, and moisture resistance.

Features

Tough hardened film

Adhesion

Endurance

water resistance

moisture resistance

Chemical resistance

solvent resistance

alcohol resistance

oil resistance

Physical Endurance

weather resistance

abrasion resistance

Recommended Printed Materials

Material

olefin-based

Treated Polyethylene [PE]

Processed PE bottles

Treated Polypropylene [PP]

Processed PP sheets

Processed PP molded products

Rigid polyolefin

Untreated Polypropylene [PP]

Untreated PP sheets

Painted surface

Painted metal

Coated metal sheet

Final product

Polybottle

Finish, Texture, and Visual Effects

finish

gross

Color & Grade

Standard Colors (Standard Colors)

00 Medium

01 White

08 Red

16 Pink

25 Purple

28 Orange

35 Asa Leek

45 Dark Blue

46 Blue

75 Green

90 Black

Standard Colors (Weather-Resistant Colors)

06 Cinnabar

13 Qing Huang

14 Yellow

18 Red

87 Ultramarine



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Specifications

Lotus form

1kg Ink Can

How to use

- Add an appropriate amount of diluent solvent (#150速乾, #170標準, #200遅乾, #250リターダー) and stir well before printing.
- For polyolefins, please apply corona discharge treatment or frame treatment as much as possible before printing. The ink's adhesion is further improved.
- For surface treatment, please refer to the attached sample "[Surface treatment of polyolefin material](#)". Please refer to the "" section.
- For untreated PP materials, even OPS ink may lack sufficient adhesion. In such cases, there are methods to improve adhesion, so please try the following.
 - Apply the primer and print the OPS ink.
 - Print OPS Medium + JA-P17 (10~20%) instead of primer.
 - By adding 5~10% of JA-P17 adhesive enhancer to ink for printing, adhesion performance is significantly enhanced. When using JA-P17, print performance decreases, and gloss and density may also decrease, so please be careful.
- For printing on industrial parts, OPS ink may lack sufficient adhesion and physical properties. In such cases, after corona discharge treatment or frame treatment, print 1000 series epilite, 2000 series AP, or APG ink.

print edition

Cleaning

#150速乾溶剤 or vinyl cleaning solvent

Recommended Printing Film Thickness

middle

Curing Method & Conditions

Evaporative Drying Conditions

Dry fingertips

PP sheet, at 20° C

- #170標準 10% addition: about 10 minutes
- #200遅乾 10% addition: about 15 minutes
- #250リターダー 10% addition: about 20 minutes

completely dry

60° C about 5 minutes

Since adhesion also improves, we recommend forcing drying.

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

Conditions

Test ink	OPS5690 black
diluent solvent	#170標準溶剤 (15%)
print edition	250 mesh
drying conditions	Room temperature over 48 hours

Results		
Test Items	Test Method	Results
Adhesion	100/100 Cross-Cut Cellotape Peel Test	100/100 No peeling
pencil hardness	750g load capacity, peel hardness	H
water resistance	Soaked in 25° C water for 240 hours	No external abnormalities Adhesion 100/100
Water Temperature Resistance	Soak in 45° C water for 4 hours	No external abnormalities Adhesion 100/100
moisture resistance	60° C Humidity 95% 96 hours	No external abnormalities Adhesion 100/100
weather resistance	Xenon Weather Meter 300 Hours	No external abnormalities
acid resistance	0.1N sulfuric acid aqueous solution, soaked at room temperature for 24 hours	No external abnormalities
Alkali resistance	0.1N sodium hydroxide aqueous solution, soaked at room temperature for 24 hours	No external abnormalities
abrasion resistance	Academic vibration type, load 1kg, 500 round trips	No abnormalities
alcohol resistance	Ethanol 99.5%, Electronic Oscillation Type, Load Capacity 500g, 100 Round Trips	No abnormalities
Gasoline resistance	Regular gasoline, automatic swing type, load capacity 500g, 5 round trips	No peeling, gloss changes present

Weather Resistance List

Grade	color name
7	5600 Medium 5601 White 5608 Red 5635 Light Onion
7-8	5606 Jin Chi 5613 Qinghuang 5614 Yellow 5616 Pink 5618 Red 5625 Purple 5628 Orange
8	5645 Dark Blue 5646 Blue 5675 Green 5687 Gunqing 5690 Black

Notes

- Not suitable for printing on soft polyolefins (such as polyethylene film or foamed polyethylene sheets).
- Export OPS ink is set separately.
Export OPS inks have lower weather resistance than domestic OPS inks.
Please be aware if you are considering using OPS ink at an overseas factory.
- 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.