

English Version (Japanese Translation)

screen ink

Evaporative Drying Ink

general printing | Evaporative drying type

# PC Ink 8000 Series

This is an evaporation-drying type ink developed specifically for printing on industrial instrument panels and nameplates made from polycarbonate.

## Product Features

- Its main feature is the excellent flexibility and flexibility of the coating.
- The material does not cause cracks and has excellent adhesion.
- Excellent printability, with no chipping or pinholes.
- It has excellent flexibility, making punching and wringing easy.
- The physical properties of the dry film are excellent.

### Features

printability

flexibility

Crack-free material

flexibility

Adhesion

physical strength

### Endurance

solvent resistance

alcohol resistance

Physical Endurance

weather resistance

## Recommended Printed Materials

### Material

Polycarbonate [PC]

PC Industrial Dashboard

PC Nameplate

### Final product

Nameplate

### Post-processing and secondary processing

punching

Heat Drawing

## Finish, Texture, and Visual Effects

### finish

gross

## Color & Grade

### Standard Colors (Standard Colors)

00 Medium

01 White

05 Gold Red

08 Red

16 Pink

25 Purple

28 Orange

35 Asa Leek

45 Dark Blue

46 Blue

75 Green

90 Black

92 Black

### Standard Colors (Weather-Resistant Colors)

13 Qing Huang

14 Yellow

18 Red

87 Ultramarine

## Specifications

### Lotus form

1kg Ink Can

### Accessories

Matting agent (1kg can)

## How to use

- Dilute with PC solvent (standard, slow drying) before use.  
When printing fine lines, you can use a PC retarder or a PC-special retarder.  
Also, using solvents other than PC solvents can cause cracks in polycarbonate materials.

## print edition

### Types of Editions

photographic plate

### Cleaning

Vinyl cleaning solvent

### Recommended Printing Film Thickness

middle

## Curing Method & Conditions

### Evaporative Drying Conditions

#### Dry fingertips

- PC standard solvent additive 25%
  - Room temperature 25° C: about 10 minutes
  - Heat to 60° C: about 1 minute
- PC Slow-Drying Solvent Additive 25%
  - Room temperature 25° C: about 15 minutes
  - Heat to 60° C: about 1 minute
- PC Retarder Additive 25%
  - Room temperature 25° C: about 20 minutes
  - Heat to 60° C: about 2 minutes
- PC Special Retarder Additive 25%
  - Room temperature 25° C: about 40 minutes
  - Heating to 60° C: about 4 minutes

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

### Conditions

|                      |                        |
|----------------------|------------------------|
| <b>Material</b>      | Polycarbonate          |
| <b>Inks Used</b>     | PC Ink                 |
| <b>print edition</b> | 250 mesh               |
| <b>emblem</b>        | 60×60mm solid printing |
| <b>Ink drying</b>    | completely dry         |

Results

| Test Items          | Test Method                                                             | Results              |
|---------------------|-------------------------------------------------------------------------|----------------------|
| Adhesion            | Cross-Cut Cellotape Peeling                                             | 100/100              |
| pencil hardness     | JIS K5400 8.4 Pencil Scratch Test Load 1kg                              | 2H                   |
| impact resistance   | JIS K5400 8.3.2 DuPont Impact Test<br>Φ1/2in、500g、30cm                  | No cracks or peeling |
| flexion resistance  | JIS K5400 8.1 Bend Test Diameter 2mm                                    | No cracks or peeling |
| blow resistance     | Cutting by punching                                                     | No cracks or peeling |
| weather resistance  | Sunshine Weather Meter 700 hours                                        | No abnormalities     |
| heat resistance     | 100° C 24 hours                                                         | No abnormalities     |
| cold resistance     | -40° C 24 hours                                                         | No abnormalities     |
| moisture resistance | 60° C 95% RH 96 hours                                                   | No abnormalities     |
| water resistance    | 24 hours underwater at 40° C                                            | No abnormalities     |
| heat cycle          | -30°C(2.5H) → 25°C(0.5H) → 100°C(2.5H) → 25°C(0.5H)<br>This is 4 cycles | No abnormalities     |
| alcohol resistance  | Rubbing test with 99.5% ethanol                                         | Over 100 times       |

Weather Resistance List

| Grade | color name                                                                                               |
|-------|----------------------------------------------------------------------------------------------------------|
| 6     | 8005 Gold-Red<br>8018 Red                                                                                |
| 6-7   | 8013 Qinghuang<br>8014 Yellow                                                                            |
| 7     | 8000 Medium<br>8001 White<br>8008 Red<br>8035 Asagong                                                    |
| 7-8   | 8016 Pink<br>8025 Purple                                                                                 |
| 8     | 8028 Orange<br>8045 Dark Blue<br>8046 Blue<br>8075 Green<br>8087 Ultramarine<br>8090 Black<br>8092 Black |

- Mixed colors are lower than primary colors.  
Especially for smoke and light colors, weather resistance drops significantly.
- We only stock some colors (white, black, medium).  
Please note that colors other than these are made-to-order products.

## Notes

- Polycarbonate materials have weak solvent resistance, so when the solvent inside the ink is attacked, Cracks and deformation occur, reducing mechanical strength.
- Polycarbonate is used as a durable material,  
The ink printed on this also needs sufficient strength and durability.
- Polycarbonate materials used as industrial components undergo punching or drawing processes after printing.  
The ink film must withstand these processing conditions.
- If cracks occur during the printing of polycarbonate molded products,  
The material needs to be annealed.
- It forms a highly flexible film, but the film's heat resistance is problematic.
- This is a relatively strong type of ink.  
For low-odor inks, we recommend the "SNAP Ink 8100 Series."
- The adhesion to acrylic material is not very good.  
For printing on acrylic materials, we recommend the "SNAP Ink 8100 Series."
- 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.