

English Version (Japanese Translation) | Products for overseas markets

Post-Order Production | Specific Customers

screen ink

Evaporative Drying Ink

general printing | Evaporative drying type

EMA Ink 8300 Series

This is a low-cost, high-quality evaporative drying ink developed specifically for printing industrial instrument panels and nameplates made of polycarbonate.

This is a highly cost-effective ink.

Product Features

- The material is resistant to cracks and has excellent adhesion.
- This ink excels in printability, making it less likely to cause chipping or pinholes.
- It has good flexibility and excellent post-processing such as punching.
- It is highly resistant to oil, alcohol, and chemicals.

Features

post-processing

printability

flexibility

Crack-free material

Adhesion

low price

Endurance

Chemical resistance

solvent resistance

alcohol resistance

oil resistance

Recommended Printed Materials

Material

Vinyl

Rigid Vinyl [PVC]

General plastic

Acrylic [PMMA]

Acrylic Industrial Instrument Panels

Acrylic Automotive Dashboard

Acrylic Nameplate

Acrylonitrile Butadienestyrene [ABS]

Polycarbonate [PC]

Final product

Industrial Dashboard

Automotive dashboard

Nameplate

Post-processing and secondary processing

punching

Color & Grade

Standard Colors (Standard Colors)

 00 Medium

 01 White

 08 Red

 16 Pink

 25 Purple

 28 Orange

 45 Dark Blue

 46 Blue

 75 Green

 85 Ultramarine

Standard Colors (Weather-Resistant Colors)

 06 Cinnabar

 13 Oing Huang

 14 Yellow

 18 Red

How to use

- Use PC solvent (standard, slow-drying, retarder) as the dilution solvent.
- If you need to print fine strokes, use a PC special retarder.
- Some molded polycarbonate products and some sheet materials are prone to cracking.
If cracks occur, please anneal the material.
Alternatively, using SSP standard solvent (special) as the dilution solvent may improve the situation.

print edition

Types of Editions

photographic plate

Cleaning

Vinyl cleaning solvent

Curing Method & Conditions

Evaporative Drying Conditions

Dry fingertips

- When printed on polycarbonate
 - PC standard 20% dilution: room temperature, about 15 minutes
 - PC Slow Drying 20% Dilution: Room temperature, about 20 minutes
 - PC retarder 20% dilution: room temperature, about 25 minutes
 - PC Special Retarder 20% dilution: room temperature, about 35 minutes
- When
printing on automotive dials or industrial instrument panels, we recommend heat-drying to prevent outgassing caused by residual solvents.
 - PC standard 20% dilution: 70° C or higher, about 15 minutes
 - PC Slow Drying 20% Dilution: 70° C or higher, about 20 minutes
 - PC Retarder 20% dilution: 70° C or higher, about 20 minutes
 - PC Special Retarder 20% dilution: 70° C or higher, about 20 minutes

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

Conditions

Substrate Used	Polycarbonate
dry	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	Peel hardness: 5H Hardness of damage: F
impact resistance	JIS K5400 8.3.2 DuPont Impact Test φ 1/2in、 500g、 10cm	No cracks or peeling No transparency
flexion resistance	JIS K5400 8.1 Bending Test Diameter 6mm 90°	No cracks or peeling No transparency
blow resistance	Cutting by punching	No cracks or peeling
heat resistance	100° C 24 hours	No abnormalities
moisture resistance	60° C 95% RH 96 hours	No abnormalities
abrasion resistance	Cotton Kanakin No.3 Fabric 500g 5.5m/S 30 times	No abnormalities
oil resistance	Type 2 for Automobiles SAE75W 1-hour immersion	No abnormalities
alcohol resistance	Ethanol (Class 1 reagent) rubbing 100 times	No abnormalities
water resistance	24 hours in 50° C warm water	No abnormalities
Cold and Hot Cycle	-30° C ・ 2.5hr → Room temperature 0.5hr → 100° C ・ 2.5hr → Room temperature 0.5hr This is 4 cycles	No abnormalities
weather resistance	Sunshine Weather Meter 300 hours	No abnormalities

Weather Resistance List

Grade	color name
6	8316 Pink 8318 Red 8385 Gangqing
6-7	8313 Qinghuang 8314 Yellow
7	8300 Medium 8301 White 8306 Jin Chi 8308 Red
7-8	8325 Purple 8328 Orange
8	8345 Dark Blue 8346 Blue 8375 Green 8392 Black

- Blended colors have lower weather resistance than primary colors.
Smoke and light colors in particular have significantly reduced weather resistance.

Notes

- Using diluent solvents other than PC solvents makes polycarbonate more prone to cracks.
- 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.