

## 3700 SERIES PIM INK

### INTRODUCTIONS

3700 SERIES PIM INK is two-component ink for insert molding and in-mold-molding. It dries at low temperature and forms flexible ink film with good heat resistance. PIM is environmentally friendly low-odor ink.

### APPLICATIONS

Polycarbonate/PET film for insert molding and in-mold molding, Polycarbonate for name plates

### CHARACTERISTICS

- PIM INK dries at low temperature of 80 - 90 °C.
- Ink film is tough and flexible, which is suitable for molding.
- Good heat resistance that is required for insert molding and in-mold molding.
- Mirror effect is not spoiled when used as backing of [FUNCOAT Meta-Mirror Ink](#).

### HOW TO USE

Please make the below mixture :

- PIM Ink : 100
- Hardener JA-930 : 3-10 (standard ratio is 6 parts)
- #150 - #200 thinner : 10-30

\* When even print cannot be obtained due to static electricity, please use PA thinner up to 5%.

### DRYING

- Tack-free drying : 80°C x 5 minutes
- Standard drying : 80°C x 60 minutes

### POT LIFE

Approx.6 - 8 hours at room temperature (25°C)

### STENCIL & WASHING UP

Use photostencil. Vinyl Cleaning thinner is recommended for washing up.

### COLORS & TYPE OF PACKING

- Standard 14 colors : 1kg can
- JA-930 : 0.1 kg can

### PRECAUTIONS

1. JA-930 becomes solid by the reaction with humidity. Please keep the lid tightly closed and store it in a cool and dark place. Once the can is opened, the skim may appear during the storage. The product can be used by removing the skim if it's before expiry date. The shelf life of JA-930 is one year after manufacturing date if unopened and three months after opening the container.
2. Please refer to MSDS before use.

3. Be sure to do trial print before commercial run to confirm that the product fits the purposes.

## PROPERTIES

1. Ink : PIM 3790 Black  
(Meta-Mirror ink HG Silver is printed on the half of the material with the backing of 3790 Black)
2. Thinner : #170 standard drying
3. Hardener : JA-930 by 6%
4. Substrate : Teijin Panlite Sheet 0.5mm
5. Mesh : 250 meshes/inch
6. Drying : 80°C 60 minutes

TEST ITEMS	TEST METHODS	RESULTS
Adhesion	Cross-hatch + tape-peeling	100/100 No peel-off
Pencil hardness	JIS K5400 pencil scratch	B
Heat resistance	100°C x 72 hours	No problem

- The above data are obtained by our lab test and are not guaranteed information.

## PROPERTIES OF MOLDED MATTER

1. Molded resin : Toray ABS Toyolac 920 Natural

TEST ITEMS	TEST METHODS	RESULTS
Humidity resistance	60°C x 95%RH x 168 hours	No problem on the appearance No Peel-off
Warm water resistance	Immersion in 40 °C water for 48 hours	No problem on the appearance No Peel-off
Heat resistance	70°C x 100 hours	No problem on the appearance No Peel-off
Heat-cold cycle test	70°C -> -30°C 2 hours each x 10 cycles	No problem on the appearance No Peel-off

- Half of the first layer is Meta-Mirror ink HG Silver + JA-950(3%) with 3790 as backing.  
Other half is printed only with 3790 with no mirror ink underneath.