

Solvent Base

Ink

7600 Series Glass ink

FIELD OF APPLICATION

Substrates

The screen printing ink 7600 is excellently suited to print onto

Glass

Ceramics

Metals

Coated Metals

Chrome plated components

Thermosetting Plastics

Lacquered components

Field of Use

This ink is designed for indoor use only. 7600 series is designed to print on Glass products like Mobile Glass (Touch Panels), home appliances (oven/chimneys), perfumes bottles, nail polish containers, beverage bottles, furniture (tabletops), office glass partition (Indoors). Photo-frames, handicraft, Glass doors, Electronics products. It is also used for promotional products made up of Glass and Ceramics which demands limited dish washer resistance.

The ink can be used as 2 component ink. This special ink has compared to other 2 component inks, a very good adhesion to the substrate.

7600 can also be processed with spray gun, drawing brush on Glass material. In order to avoid surface irregularities, we recommend

to filter the thinned ink (25 microns screen) before processing.

CHARACTERISTICS

This glossy, physically drying and chemical reactive screen printing ink exhibits good water resistant, mechanical & chemical resistance as well as good adhesion. Excellent printability and stable in color matching. 7600 series can be processed by hand printing, with semi automatic machine or fully automatic machines.

HOW TO USE

Screen printing

Remove the dirt or oil stain from the surface of the substrate to make sure it is clean before printing.

Dilute the ink with 10%-20% TP-65 (slow dry thinner) or TP-69 (medium dry thinner). Use TP-67 to make the drying slower. You may add Hardener 7600-900 to improve the mechanical strength of the ink on substrate. It is important to note that after mixing hardener and thinner in the ink keep it for 15 minutes to allow the ink & hardener to pre-react before start the printing. flame treatment / oxidation before printing helps to improve adhesion. 7600 is designed to dry slowly in order to avoid clogging.

For overprinting, the next color is printed only after the previous printing ink becomes tack free.

Mesh Recommended- 68T-90T, for finer details 100T-120T

Pad Printing

Cliché/plates made of thin steel, chemical hardened steel (thickness -10mm, hardness 60-62HRC), ceramic, photopolymer can be used. The recommended depth in cliché is 20-25 microns.

Tack Time	Free	5-10 minutes	Natural Cure
Hard Time	Drying	10-15 minutes	120°- 180° C

If the temperature of post treatment is too high, the ink layer will be yellowish.

If several layers are printed longer drying time is recommended.

If several layers of printing is done then the first layer and middle printing layers curing condition is 80 C for about 10 minutes to make the ink surface touch dry and the last printing layer curing condition is 180C about 10 minutes to make sure the ink is fully cured.

Note: The ink film achieve its physical properties like adhesion ,scratch and chemical resistance etc. only after 24 hours of oven curing process.

CLEANER

Use TP-65 for cleaning the screen /washing up.

RANGE OF COLORS

Basic Colors

- 100 Transparent
- 105 H.D. White
- 201 Deep Yellow
- 203 Original Yellow
- 206 lemon yellow
- 300 Rose Red

- 3020 Dark Red
- 3038 Light Resistant Magenta
- 304 Bronze Red
- 305 Orange
- 401 Violet
- 403 Original Blue
- 404 Ultra Marine
- 408 Emerald Blue
- 501 Black
- 601 Green
- 701 Brown

Fluorescent Colors

- 131 Fluorescent Yellow
- 133 Fluorescent Red
- 134 Fluorescent Orange
- 140 Fluorescent Green
- 148 Fluorescent Blue
- 141 Fluorescent Violet

Metallic Colors

- 801 Silver
- 901 Pale Gold
- 902 Rich Gold

ADDITIVES

Thinner:

Before production, the viscosity of the screen printing has to adjusted by the addition of thinner.

Thinner, very fast (addition 15%-25%)
TP-61

Thinner, standard (addition 15%-25%)
TP-65

Retarder:

Thinner, slow (addition 15%-20%)
TP-67

Retarder TP-67 can be used along with TP-65 or TP-61 to meet the printing requirement.

Hardener

Prior to printing hardener must be added in correct quantity and always by weight and mixture must be stirred thoroughly. Hardeners are sensitive to humidity and always to be stored in a sealed container. Hardener 7600-900 is the standard hardener.

The two different ratio are

- 1) 10% Hardener 7600-900
10 parts of ink by weight + 1 part of hardener by weight
- 2) 15% Hardener 7600-900
8.5 parts of ink by weight + 1.5 part of hardener by weight

The second variation must be applied if high resistance is required.

Custom Colors

Pantone/RAL colors are custom made colors and can be developed as per request.

TYPE OF PACKING

1-kg Can

SHELF LIFE

Shelf life depends on the reactivity of the ink while adding hardener as well as storage conditions (temperature).

The shelf life for an unopened ink container if stored in dark room at a temperature of 15°-25° C is

- 1) 2 years for the basic colors
- 2) 1 year for Metallics and fluorescent colors.

Under different conditions, particularly higher storage temperatures, the shelf life is reduced. In such case, the warranty given by Spinks expires.

PRECAUTION

- 1) Hardener 7600-900 is the standard hardener. At room temperature 20°C-25°C a pot life is 6-8 hours. If temperature is higher shelf life of the ink will reduce.
- 2) Since all the substrates suitable to print are different in nature and may be different in printability, preliminary trials are important to confirm the suitability for the requirement.
- 3) Ink is glossy. Matt ink can be developed on request.
- 4) Please refer MSDS before use.
- 5) Be sure to do trials before commercial run to confirm that the product fits the purpose.
- 6) Additional technical information may be obtained from our Technical Department.
- 7) All characteristics described in this Technical Data Sheet refer exclusively to the standard products listed under range, provided that they are processed in accordance with the intended use and only when used with the recommended additives. The selection and testing

Technical Data Sheet

Screen Printing inks

2020
24,Jan

of the ink for specific applications is exclusively your responsibility.

Should, however, any liability claims arise, they shall be limited to the value of the goods delivered by us and utilized by you with respect to any and all damages not caused intentionally or by gross negligence.

GLASS INKS TESTING	
Test items	Test Methods
Nail test	150 Cycles
Graph test (or) Cross hatching tape test	Cross hatching & Scotch tape test
Acetone resistance	50 Cycles
IPA resistance	50 Cycles
Alcohol resistance	50 Cycles
Xylene resistance	100 Cycles
Hardness	Pencil hardness 5H, Rhizoma Sparganii Pencil, 500gX45°
Methanol resistance	100 Cycles
Coldness resistance	48 Hr's
Boiling water resistance	Immersion, 30 mins
Gasoline resistance	100 Cycles
Salt Resistance	5% of NaCl
Acid Resistance 5% HCL X 24 hours	5% HCL X 24 hours
Alkali resistance 5% NaOH X 24 hours	5% NaOH X 24 hours
<p><u>Note:</u> All test carried out after 48hr's printing. Immersion test was performed at room temperature. The above information were gained by our laboratory testing and no guarantee is implied.</p>	