

# Ink SI Series

## FIELD OF APPLICATION

## Substrates

Screen-printing ink SI is excellently suited to print onto Silicone Rubber

## Field of Use

SI series is designed to print on products made up of Silicone material like Wrist bands, Remote keypads, material coating with Silicone, Hose pipe, Remote Key covers, Wristwatch straps, Grippers of Kitchen Appliances, Silicone molds for baking, Silicone Gloves, Catheters, Silicone medical products, Tubes, Mobile covers, Automotive components, Electronic components, Medical components, seals, credit cards wallets, swimming caps, Eye Gears, Silicone Bracelets, Medical tubing, Silicone Heal Soles, Silicone sleeves

The ink is used as two component ink. This special ink compared to other 2 component inks, has a very good adhesion to the silicone substrate and is highly qualified for adhesion standard.

SI can also be processed with spray gun, drawing brush on Silicone material. In order to avoid surface irregularities, we recommend filtering the thinned ink (25 microns screen) before processing.

## CHARACTERISTICS

This glossy, oven drying, and chemical reactive screen-printing ink exhibits alcohol resistance, good mechanical & chemical resistance as well as good flexibility and adhesion. Excellent print ability and stable in color matching. This ink has a good levelling property.

## HOW TO USE

SI Silicone ink is two component ink. Mixing ratio is 10:1. 10 part of ink by weight and one part of hardener by weight. Dilute the ink with 10%-20% TP-70 (standard drying thinner). Use TP-60 to make the drying slower. For Screen Printing Mesh Recommended- 80T-120T

|                |               |             |
|----------------|---------------|-------------|
| Post Treatment | 20-30 minutes | 180°C-200°C |
|----------------|---------------|-------------|

If several layers are printed, each color needs post treatment before next printing is recommended

### **CLEANER**

Use TP-70 for cleaning the Screen /washing up.

### **RANGE OF COLORS**

#### **Basic Colors**

104-White  
203-Original Yellow  
209-Mid Yellow  
302-Deep Red  
305-Orange  
3038-Light Resistant Pink  
401-Violet  
403-Original Blue  
404-Ultramarine Blue  
408-Cyanine Blue  
501-Black  
601-Green

#### **Fluorescent Colors**

131-Fluorescent Yellow  
133-Fluorescent Red  
140-Fluorescent Green  
159-Fluorescent Pink

#### **Metallic Colors**

801 Silver  
901 Pale Gold

### **ADDITIVES**

#### **Thinner:**

Before production, the viscosity of the screen printing must be adjusted by the addition of thinner.

TP-70 Thinner very fast drying  
( addition 15%-25%)

TP-60 Thinner Slow drying ( addition 15%-25%)

#### **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. SI Hardener is the standard hardener. The two different ratios are

- 1) 10% SI Hardener  
20 parts by weight of ink + 1 part of hardener by weight
- 2) 15% SI Hardener  
10 parts by weight of ink + 1 part of hardener by weight

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

### **TYPE OF PACKING**

1-kg Can

### **SHELF LIFE**

Silicone ink is sensitive to humidity and always stored in a sealed container and at low temperature.

The shelf life for an unopened ink container if stored ink dark room at a temperature of 15°C-25°C is one year. Under different conditions, particularly higher storage temperatures, the shelf life is reduced. In such case, the warranty given by Spinks expires.

### PRECAUTION

- 1) At room temperature 20°C-25°C ink can be used for 3-4 hours. If temperature is higher shelf life of the ink will reduce.
- 2) Ink is glossy. Matt ink can be developed on request.
- 3) Prepared ink cannot be put back in the container.
- 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 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 all damages not caused intentionally or by gross negligence.