



## SPPC Series Silk Screen Ink (Retort Resistant PP Baby Bottle)

### 【Printing substrate】

All types of PP baby bottle, PP container

### 【Physical properties】

- ❖ High gloss, vivid colour, good printing performance
- ❖ Double component, use together with curing agent NY-1091 to achieve boiling resistant and dishwasher washing resistant
- ❖ Varnish for this series is acidic which can cause gold and silver powder to cross-link. It is not recommended to store gold and silver ink, instead prepare it right before printing
- ❖ Surface dry: 75-85 °C x 3-5 min drying tunnel  
Complete dry: (Natural drying): 20-24 hr, 75±5 °C drying tunnel or drying oven for 30 min  
Recommended to use heat drying: (75±5 °C) 30min to ensure good ink adhesion and performance. Ink after complete dry for 24 hr, good adhesion, resistance and toughness can be achieved

### 【Colour code】

Code	Hue	Eco-friendly grade	Code	Hue	Eco-friendly grade
SPPC-P100NT/1	pale yellow	A	SPPC-V100/1	purple	A
SPPC-Y100NT/1	gold yellow	A	SPPC-UA100/1	cyan	D
SPPC-S100NT/1	cobalt red	A	SPPC-B100/1	blue	A
SPPC-R100/1	red	A	SPPC-G100/1	green	A
SPPC-R133/1	vivid red	A	SPPC-K106/1	ultra-black	A
SPPC-M100/1	rose red	A	SPPC-W100/1	white	A
SPPC-PM100/1	magenta	A	SPPC-195/1	varnish	A

SD-1001 Smooth out agent: To enhance the fineness and 3D texture for printed words, also can increase ink transfer performance during transfer print

GP-1008 PP treatment solution: Increase PP ink adhesion



NY-1091 curing agent: Add 10-12%, improve adhesion and resistance performance:

Package 0.1KG/SW 100 g plastic bottles

### 【Screen mesh count】

Mesh count 300-420

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Test	Test method (performed 72 hr after ink is completely dry)	Result
Alcohol resistance	500g, rub 20 times	No visible peel off
Retort resistance	Boil for 15min, cool down and re boil, repeat 15 times	No visible change
Dishwasher resistance	80 °C, wash 2 h	No visible change
Vegetable oil resistance	Spread peanut oil on top of ink film, heat with microwave oven for 2 min, after cooling down boil for 15 min, repeat 15 times	No visible change
Animal oil resistance	Spread pig fat on top of ink film, heat with microwave oven for 2 min, after cool down boil for 15 min, repeat 15 times	No visible change

Data above are obtained in our lab, result might vary with different environment, please check before use

### 【How to use】

- ❖ Printing substrate need to be pretreated before print, recommend customer to treat surface with flame or using our PP treatment solution (GP-1008) for surface treatment
- ❖ Shake and stir well before use, add 10-12 % curing agent NY-1091 with stirring, add 10-15% medium drying speed solvent KTS-783 to dilute ink to printing viscosity
- ❖ In order to achieve small and fine lines, words and shape during printing, 5 % of smoothing out agent SD-1001 can be added to avoid ink from spreading, forming streaks and blur out



- ❖ For transfer print 8-10% smooth out agent SD-1001 should be added to enhance transfer print performance

After addition of curing agent the ink should be consumed within 4-6 hr, actual addition amount will affect how long the ink can be used. Adding more curing agent can increase ink adhesion and boiling resistance, but ink life will be decreased

### **【Environmental information】**

According to SGS and CTI testing, above apart from SPPC-UA100/1 cyan, all comply with ROHS, EN71-3, ASTM-F963, HR4040 environmental requirement, it also comply with “Bauhinia Variegata eco- friendly category A”. Customer is recommended to assess whether the ink meets environmental requirement before use

### **【Storage】**

Ink should be stored in cool places, ink can be stored under ambient temp. for 24 months, gold and silver ink can be stored for 6 months, please check quality of ink before use. When use under standard EHS rules this product should not be harmful to human body, like other typical chemicals when using this product please avoid touching skin and eyes, if touched please wash it with water and seek medical attention. See MSDS for more.

### **【Disclaimer】**

This specification is in accordance with the actual production and test results, whether the product could meet your process requirements depends on application conditions and printed material. We recommend the users to assess if the product can meet all their requirements before production. Since we cannot predict or control your printing condition, the product performance cannot be guaranteed all sales are subjected to the standard terms and conditions of the sales control division.