



# PPSU Series Screen Printing Ink

## (PPSU Retort resistance and PES milk bottle ink)

### 【Substrate】

All kinds of PPSU and PES bottles and containers.

### 【Product feature】

- ❖ High gloss, bright color, good printing performance.
- ❖ Two component ink, with curing agent NY-1091, resistant to boiling water cooking and dishwasher cleaning.
- ❖ This series of varnish has strong acidity, which makes gold and silver powder oxidized and crosslinked easily. Gold and silver ink are not recommended to stock, it is recommended to deploy when used.
- ❖ Surface drying: 3-5min for drying tunnel at 80-90°C

Completely drying (natural drying): 12-14h Drying tunnel or oven at 80±5°C:30min

It is recommended to use drying temperature of 80±5°C for 30min to ensure ink adhesion and resistance. After the ink is dried for 24 hours, the ink layer can achieve satisfactory adhesion, resistance and toughness.

### 【Basic color】

NO.	COLOR	EP LEVEL	NO.	COLOR	EP LEVEL
PPSU-PT100NT	Light Yellow	A	PPSU-V100	Purple	A
PPSU-Y100NT	Golden	A	PPSU-UA100	Cyan	D
PPSU-S100NT	Orange-red	A	PPSU-B100	Blue	A
PPSU-R100	Bright red	A	PPSU-G100	Green	A
PPSU-R133	Scarlet	A	PPSU-K00	Black	A
PPSU-M100	Rose red	A	PPSU-W100	White	A
PPSU-PM100	Pink	A	PPSU-195	Varnish	A

**SD-1001 Smooth out agent:** used to improve the clarity and three-dimensional effect of the fine text of silk screen printing, and help to improve the transfer performance of ink pad printing.



**NY-1091 Curing Agent:** add 10-12% to improve adhesion and resistance. Package: 0.1KG/SW is packed in 100g plastic bottle

**【Mesh count】**

300-420 mesh count

**【Resistance】**

<b>Test items</b>	<b>Test method</b> (72 hours after the ink is completely dry)	<b>Result</b>
Alcohol resistance	500g force, 200 times back and forth	No obvious peel off
Retort resistance	Boiling water for 15 minutes, cooling and then boiling, circulate 15 times.	No visible change
Dishwasher resistant	Wash for 2h at 80°C.	No visible change
Vegetable oil resistance	Apply peanut oil on the ink surface, microwave oven for 2 minutes, cool, boil water for 15 minutes, and cycle 15 times	No visible change
Animal fat resistance	Apply lard on the surface of the ink, microwave oven for 2 min, cool, boiling water for 15 min, and cycle 15 times.	No visible change

The above data is obtained from our laboratory test. Due to different working environment, please test before batch printing and use after confirmation.

**【Process】**

- ❖ Before using the ink, first stir the ink thoroughly, then add 10-12% curing agent NY-1091 to mix well, and add 10-15% KTS-783 medium dry solvent to dilute to printing viscosity.
- ❖ In order to achieve excellent printing effect of fine lines, patterns and characters, about 5% smooth out agent sd-1001 can be added to better prevent printing ink diffusion, burr and blur.
- ❖ When pad printing, 5-10% smooth out agent SD-1001 should be added to improve pad printing performance.

The effective service life of the ink added with curing agent is 4-6h, and the specific amount of curing agent will affect the service life of the ink. Increasing the content



of curing agent can improve the adhesion and boiling resistance of the ink, but the life of the ink will be shortened accordingly.

### **【Environmental information】**

According to years of testing by SGS and CTI, the basic colors(except PPSU-UA10 cyan) of this series are in compliance with ROHS, EN71-3, ASTM-F963, HR4040 and other environmental protection requirements, and in line with “Bauhinia Environmental Protection Level A”, but in order to ensure that the product is not affected during transportation and use pollution, it is recommended that customers conduct corresponding environmental protection inspections and performance tests before use, and only use them in batches after confirming that they are correct.

### **【Storage and Note】**

The ink should be placed in cool place. The ink can be stored for 24months at room temperature at 25°C. If the ink is more than 24months, the printing quality should be reconfirmed by trial printing. This product should not be harmful to human body if it is used according to the standard health regulation and safety regulation. However, like other general chemicals, you should try to avoid skin and eyes contamination when using this product. If it is splashed, rinse with plenty of water and treated. See MSDS for details.

### **【Disclaimer】**

The data shown in this document is based on actual production and test result generated within our company. Above data is only for reference and does not bear any legal guarantee responsibilities. Whether actual ink performance can meet user's requirement depends on application conditions and substrate etc. We suggest that users should access whether current production conditions meet the application requirement of each product before printing. Since we cannot control the actual application and storage conditions, we cannot guarantee the final product performance. All product sales subject to our standard sales terms and conditions.