

Ink

Solvent Base

## PRN Series

### FIELD OF APPLICATION

#### Substrates

The screen printing ink PRN is excellently suited to print onto

PU leather

PVC leather

Genuine leather

EVA (Split, Molded, Skin)

TPU

Polyester

Water-Proof Nylon

Nylon

#### Field of Use

PRN series is designed to print on Flip flop, Hawai Chappal, Molded EVA Sleeper, EVA Sandals, EVA Shoes, EVA Yoga Mat, EVA Toys, Backpack, Umbrella.

The ink can be used as 1 or 2 component ink. This special ink has compared to other 2 component inks, a very good adhesion to the substrate and is highly qualified for footwear standard.

PRN can also be processed with spray gun, drawing brush on EVA 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 mechanical & chemical resistance as well as good flexibility and adhesion. Excellent printability and stable in color matching.

### HOW TO USE

Apply EVA Primer 2303 to EVA substrate by wiping to improve the mechanical strength of the ink. Dilute the ink with 10%-20% TP-65 (slow dry thinner) or TP-69 (medium dry thinner). Use TP-67 to make the the drying slower . You may add Hardener 37172hardener/ 9004 Hardener to improve the mechanical strength of the ink on substrate.

For Synthetic and Genuine leather always advisable to use as 2 component ink. Some PU material needs post treatment after printing.

PRN is designed to dry slowly in order to avoid clogging.

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

Mesh Recommended- 40T-120T

Tack Free Time	5-10 minutes	Natural Cure
Hard Drying Time	6-8 hours	Natural Cure

If several layers are printed longer drying time is recommended

#### CLEANER

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

#### RANGE OF COLORS

##### Basic Colors

100 Transparent

104 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

### 4 Color Process Printing inks

Process Black  
Process Red  
Process Yellow  
Process Blue

### 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 9004 is the standard hardener -H  
The two different ratio are

- 1) 5% Hardener 9004/ H 20 parts by weight of ink + 1 part of hardener by weight
- 2) 10% Hardener 9004/ H 10 parts by weight of ink + 1 part of hardener by weight

The second variation must be applied if high resistance ( e.g. dry & wet Test) is required.

#### Custom Colors

Pantone/RAL/TPX 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 ink dark room at a temperature of 15°-25° C is

- 1) 2 years for the basic colors and Process 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 9004/H is the standard hardener. At room temperature 20°25°C a pot life is 4-5 hours. If temperature is higher shelf life of the ink will reduce.
- 2) Ink is glossy. Matt ink can be developed on request.
- 3) As PVC doesn't have good solvent resistance, it may cause tackiness problem while stacking Nylon material with PVC laminated from backside, make sure finished products are dried thoroughly and avoid stacking together. When printing on Nylon with backside laminated PVC, it is easy to cause color transformation, to solve this problem, use color with good penetration resistance.
- 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
- 8)

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 any and all damages not caused intentionally or by gross negligence.

Properties	
Items	Performance
Adhesion	Excellent
Transfer resistance	Grade 4-5
Scratch Resistance	Grade 4-5
Anti-attribution	Grade 4-5
Kneadability	Grade 5
Acid Resistance	Grade 3-4
Alkali Resistance	Grade 3-4
Water Resistance	Grade 3-4

Technical Parameters	
Items	Performance
Appearance	Refer to color sample
Chroma	8%-15%
Thinness	Less than 7 microns
Viscosity	100-180P
Glossiness	70-75
Flowability	15-20mm/s
Resin	>45%