

Ink

PRN Series

FIELD OF APPLICATION

Substrates

The screen-printing ink PRN is excellently suited to print onto
 PU leather
 PVC leather
 Polyester
 Waterproof Polyester
 Waterproof Nylon
 Nylon

Field of Use

PRN series is designed to print on Bag packs, Umbrellas, Sport goods.
 This special ink compared to other 2 component inks has a very good adhesion to the substrate and is highly qualified for footwear & sport industry standard.
 PRN can also be processed with spray gun, drawing brush on recommended 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

Dilute the ink with 10%-20% TP-65 (slow dry thinner) or TP-69 (medium dry thinner). Use TP-65M to make the drying slow. You may add PRN Hardener to improve the mechanical strength of the ink on substrate. For Synthetic and Genuine leather always advisable to use 2 component ink. PRN is designed to dry slowly in order to avoid clogging. For overprinting, the next color is printed only after 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
- 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

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 be adjusted by the addition of thinner.

Thinner, fast drying (addition 15%-25%)
TP-69

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

Retarder:

Thinner, very slow drying (addition 15%-20%) TP-65M

Retarder TP-65M can be used along with TP-65 or TP-69 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. PRN Hardener is the standard hardener

The two different ratios are

- 1) (5% PRN Hardener)
20 parts by weight of ink + 1 part by weight of hardener
- 2) (10% PRN Hardener)
10 parts by weight of ink + 1 part by weight of hardener

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

5kg 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 15⁰-25⁰ 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) PRN Hardener is the standard hardener. At room temperature 20⁰-25⁰C 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 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.