



Norilit® U-SG

Screen Printing Ink and Pad Printing Ink

Area of Application and General Characteristics

Norilit® U-SG is suitable for printing on metals, pre-treated polyester films, pre-treated polyolefins, polycarbonate, powder coated and lacquered metals.

Great advantage of the ink system Norilit® U-SG is the good adhesion to untreated polyester films. For that reason Norilit® U-SG is recommended for membrane switches, front plates and decorative films in the production of gadgets and instruments.

The ink films show excellent resistance to yellowing, household cleaners, oils, lubricants, fuels and alcoholic solutions. Norilit® U-SG resists 180 °C (355 °F) for a limited time (a few minutes).

Finish

Satin glossy

Color Shades

Basic Colors	093 Colorless* ¹	429 Red Violet* ¹	669 Green Transparent* ¹
for the Proell	102 Citron* ¹	467 Pink Transparent* ¹	945 White* ¹
Matching System	312 Red* ¹	472 Violet* ¹	951 Blending Black* ¹
	368 Red Transparent* ¹	566 Blue Transparent* ¹	
Standard Colors	944 White Opaque* ¹	948 Black* ¹	

The Norilit® U-SG basic colors have been tested according to the toy standard (DIN EN 71, part 3). The results measured (TÜV Rheinland LGA Products GmbH) were significantly lower than the given limits (migration of certain elements, category 3).

Thinning

Screen printing: Thinner M 202
Thinner S 404 or Retarder Paste VZ4-P or a corresponding mixture
Addition: approx. 20 %

Pad printing: Thinner F 001 (very fast)
Thinner F 002 (fast)
Thinner M 202 (medium)
Thinner M 203 (slow)
Thinner S 402 (very slow)
Addition: approx. 30 %

Fabric

All usual screen printing fabrics and mesh counts are suitable.

Stencil

Solvent resistant emulsions must be used. Excellent results during long production runs are achieved by using Pröll Diazo-UV-Polymer Emulsion Norikor 10 HQ.

Further Directions for Processing

Substrates printed with Norilit® U-SG can be thermoformed.

*1 = Not in stock, manufactured on request.

Drying

Norilit® U-SG dries rather slowly. For printing on substrates such as metals or lacquered materials hot air drying is recommended, e.g. 120 to 150 °C (248 to 302 °F), 15 to 30 min.

Flame or hot air drying improves adhesion to polyoxymethylene (e.g. lighters made of Delrin®).

We recommend to test whether high drying temperatures influence gloss or other properties.

Overprinting

Overprint Varnish Norilit® U-SG 093 Colorless

Weather Resistance

If printed materials are intended for outdoor use, rather thick films must be printed.

We recommend using mesh of 77 threads/cm (195 threads/inch).

The relatively thin ink films printed by screen printing do not prevent from corrosion. It is necessary to degrease, clean and prime metals before printing.

Cleaning Screens and Utensils

Thinner M 202, UNI-REIN A III, UNI-CLEANER FP61

Shelf Life

The shelf life stated on the label assures the ink's quality and refers to unopened original cans stored in a dry place at temperatures between 5 °C (40 °F) and 25 °C (75 °F).

Important

Allow the ink as well as all the auxiliaries to be added to adjust to ambient temperature in the closed container before use.

Printing results, to a large extent, depend on the substrate as well as the printing and application conditions. We recommend checking your printing materials under your conditions of use prior to any production runs. Materials that are supposed to be identical may vary from manufacturer to manufacturer and even from batch to batch. Some substrates may have been treated with or can contain sliding agents, antistatics or other additives which will impair the adhesion of the inks.

In general please refer to our technical leaflet "General Information on Screen Printing Inks" which may be downloaded from our website www.proell.de, click Downloads ⇒ Solvent-Based Screen Printing Inks.

The information contained in the technical information/instruction sheets or other product information sheets is based on product testing conducted by Pröll. Because printing and environmental factors critically affect each individual ink application, the above mentioned information and instructions represent only general recommendations concerning product characteristics and directions for use and should not be construed as representing express warranties regarding the product. The information and instructions in no way release the purchaser from his obligation to verify and test the inks and their application for the specific request, regarding: product characteristics, weather resistance, mixing proportions, gloss, thinning, special mixtures, printability, drying speed, cleaning, effects on or of other materials to be contacted and safety precautions. All details contained in the instruction sheet "General Information on Screen Printing Inks" are to be considered. The further manufacture and use of products containing our inks by the purchaser takes place beyond our control, and the responsibility for further application and use of our product resides solely with the purchaser. Pröll disclaims any warranties, express or implied.

This information supersedes all previous technical information.