KS-U

Pad Printing Ink

Area of Application and General Characteristics

Fast drying pad printing ink for printing on rigid PVC, polystyrene, styrene copolymers (like ABS and SAN), acrylics and polycarbonate.

KS-U is inapplicable for printing on plasticized PVC. Contact of the printed ink film with plasticized materials has to be avoided, too.

Further Substrates

Coated materials, polyamide, pre-treated polypropylene, thermosets and metal. Metals must be absolutely free of grease in order to achieve good adhesion of the ink.

To improve adhesion in these cases, stoving and/or the use of hardener is recommended (please see "Other Directions for Processing").

Pre-tests are essential.

Finish

High gloss

Color Shades

Basic Colors	093 Colorless 102 Citron 104 Yellow*[1] 207 Orange*[1] 312 Red	368 Red Transparent 429 Red Violet 467 Pink Transparent 472 Violet 566 Blue Transparent	669 Green Transparent 945 White 948 Black
Standard Colors	173 Yellow Transparent*[2] 315 Red Medium*[2]	520 Ultra Blue*[2] 628 Green Light*[2]	944 White Opaque*[3]
Special Colors*[2]	770 Silver (abrasion resistant)	861 Rich Gold 862 Rich Pale Gold	863 Pale Gold
Highly Opaque Formulations*[2]	132 Yellow Highly Opaque 232 Orange Highly Opaque	332 Red Highly Opaque 532 Blue Highly Opaque	632 Green Highly Opaque
Process Inks	157 Process Yellow*[2] 358 Process Magenta*[2]	559 Process Cyan*[2] 948 Black	093 Colorless

The NoriPUR® basic colors as well as special color 770 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).

Matting Agent 2009

Matting Agent 2009 (see separate Technical Information) or Antiblocking Agent L30220.
Addition up to approx. 10 %

*[1] = Sensitive to temperature – do not stove dry.
*[2] = Not in stock, manufactured on request.
*[3] = Not to be used for outdoor applications.

Thinning

Thinner M 207. This Thinner is constitutionally free from cyclohexanone.
Recommended percentage: 20 – 30 %

Further Thinners:	Thinner F 001	(very fast)	Thinner F 002	(fast)
	Thinner M 202	(medium)	Thinner M 203	(slow)
	Thinner S 402	(very slow)		

Other Directions for Processing

To improve adhesion to "problematic" substrates, the ink can be stoved at 100 – 120 °C (210 – 250 °F) for about 20 min.

The good chemical resistance to redissolving can be further improved by adding Hardener 030.
Recommended addition: 10 % by weight
This mixture can be stoved at temperatures up to 120 °C (250 °F).

The Hardener 001 and Hardener 002 are compatible with KS-U, but pre-tests are strongly recommended.

Due to its high pigment load, KS-U 944 White Opaque shall not be used for outdoor applications.

Resistance

Before testing the resistance, the ink must be completely dried. A mixture with hardener needs seven days at ambient temperature or 48 hours at 50 – 60 °C (120 – 140 °F) for a thorough curing.

The results of some standard resistance tests are shown in the Technical Information "Resistance Test Results KS-U".

Cleaning Clichés and Utensils

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).

Opened containers of hardener must be tightly sealed immediately after use as the hardener reacts with moisture in the air.

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.