



Nori® Protect XCP

UV-stabilized Two-Component Screen Printing Lacquer

Area of Application

Nori® Protect XCP is a solvent-based UV-stabilized two-component screen printing lacquer for numerous substrates.

Nori® Protect XCP is suitable for printing on polycarbonate, rigid PVC, polystyrene, ABS and SAN, pre-treated PET films and corona-treated polyolefins (PE and PP) as well as for metal and aluminum.

Decorated surfaces can be overprinted resp. protected with Nori® Protect XCP (pre-tests are necessary).

The lacquer has been formulated user-friendly in terms of ingredients.

Characteristics

- resistant towards chemicals, cleaning agents
- formable on suitable substrates
- constitutionally free of:
 - Aromates
 - Cyclohexanone
 - Phthalates

Weather Resistance

When printed on suitable substrates, Nori® Protect XCP is weather resistant. For long-term outdoor durability, a screen fabric of 61-64 threads/cm (156-64 threads/inch) or coarser is recommended.

Performed Proell weathering test: QUV according to ASTM-G 53-77

Weathering period: 3.000 h (UV-A)

Substrates:

- Makrofol® DE 1-1
- Makrofol® DE 1-1 printed with NORIPHAN® HTR N 945

Mesh: 61-64 Y threads/cm (156-64 threads/inch)

Pre-tests are necessary!

To pass the weathering test, it is important to achieve a dry film thickness of at least 10 µm.

Furthermore, using a softer squeegee can also help to increase the layer thickness.

Lacquer Versions

Nori® Protect XCP 1/001 (silicone-based additives)

Nori® Protect XCP 1/002 (silicone-free)

matt versions are available on request.

Defoamer

Defoamer 9388 for the silicone-based version

Additive 9363 for the silicone-free version

Mixing Ratio and Pot Life

Hardener 028

Addition: 5 % (hardener addition before thinning)

Pot life: 8 h

Thinning

Thinner M 219 (slow)

Thinner M 218 (medium)

Thinner F 003 (fast)

Thinner M 206 (medium) recommended for problems with cellulite.

Addition: ca. 15 – 25 %

Stencil

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

Drying

Drying

Tunnel dryer: 60 – 80 °C (140 – 175 °F) depending on substrate

Curing for crosslinking

PC films: 90 °C (195 °F), 3 h

Heat sensitive films: 65 °C (150 °F), 7 days

Metallic substrates: 120 °C (250 °F), 1 h

150 °C (300 °F), 0,5 h

180 °C (355 °F), 20 min.

Cleaning Screens and Utensils

Screens and utensils which came into contact with two-component lacquers must be cleaned immediately because cured two-component lacquers become solvent resistant.

Screens and utensils can be cleaned with UNI-CLEANER FP61 or UNI-REIN A III.

Shelf Life

The shelf life stated on the label assures the product'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).

Shelf life of Hardener 028 is 6 months.

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

Important

Allow the lacquer 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, buildup of the ink to be overprinted, 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. Substrates or ink layers may have been treated with or contain sliding agents, antistatics or other additives which will impair the adhesion of the lacquer.

Before starting a production run, it is necessary to test samples of each newly designed part systematically with regard to the specifications for the intended use (e. g. climatic chamber, resistance, etc.).

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.