



NoriGlass OR

Outdoor Resistant 2-Component Glass Decorating Ink – silicone free

Area of Application and General Characteristics

OR – Outdoor Resistant

Screen printing ink for the second surface decoration of glass, particularly for symbols of touch switches and for backlit displays for outdoor applications.

Finish

Glossy

Color Shades

HF = halogen free

Basic Colors for the Proell Matching System	093	Colorless HF	371	Red Transparent
	112	Yellow HF	412	Pink Transparent HF
	171	Yellow Transparent	472	Violet
	225	Orange HF	566	Blue Transparent HF
	308	Red	669	Green Transparent
	321	Bright Red HF	948	Black HF
High Opaque Colors	930	Titanium White HF (see separate Technical Information)	960	Deep Black HF
Special Colors	750	Magnetic-Effect HF	790	Silver Glossy HF
	770	Silver HF		

Silver inks may be used to mix gold and other metallic colors.
Further color shades are available on request.

Mixing Ratio

Prior to printing, NoriGlass OR has to be mixed homogeneously with

3 % Adhesion Promoter 105 and the intended percentage of Thinner S 402.

Optimal processing is stirring (blade agitator or dissolver).

Pot Life

The mixture of ink and adhesion promoter must be processed within 8 hours. This time span refers to an ambient temperature of 20 °C (70 °F). Higher temperatures accelerate the curing process. Consequently, the quantity of the mixture should be limited in accordance with the amount which is necessary for the printing job. Even if the ink still seems to be processable an exceeding of the time limit will impair the adhesion and resistance of the printed ink film.

Thinning

Thinner S 402

Addition: 0 – 15 %; combined addition with Adhesion Promoter 105 is possible.

Mesh

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 emulsion Norikop 8 HR.

Drying

Each ink layer must be dried separately, the final curing will be done after printing of the last layer.

Minimal drying: 3 min / 80 °C (175 °F)

Maximal drying: 180 °C (355 °F), time has no influence.

Overprinting of dried/cured ink layers without any negative effects on the final properties is possible within four weeks, but it is mandatory to store the prints during this time at appropriate dry and clean conditions.

Heat Curing

Heat curing of the last ink layer without loss of quality can be done directly after printing.

Minimal temperature: 150 °C (300 °F)

Maximal temperature: 180 °C (355 °F)

Minimal time: 30 min

Heat curing of dried ink layers without any negative effects on the final properties is possible within four weeks, but it is mandatory to store the prints during this time at appropriate dry and clean conditions.

Remark

A cleaned and degreased surface of the substrate is of decisive importance regarding adhesion and resistance of the baked ink layer. When cleaning, please consider that standard (glass) cleaners often leave residues of wetting agents on the surface which may impair the adhesion of the ink specially when exposed to mechanical stress or to steam (e.g. dew).

Resistance

NoriGlass OR is recommended for long-term outdoor applications, if printed on second surface.

Cleaning of Screens and Utensils

UNI-CLEANER FP61 and UNI-REIN A III

Shelf Life

The shelf life stated on the label assures the ink's and auxiliaries' (as adhesion promoter, thinner etc.) 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 Adhesion Promoter 105 must be tightly sealed immediately after use as the adhesion promoter reacts with moisture in the air.

Important

Allow the ink as well as all the auxiliaries to be added to adjust to room 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 before performing any production runs. Materials that are supposed to be identical may vary from manufacturer to manufacturer and even from batch to batch.

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.

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This is a test product which is still in development. For this reason, no assurances are currently given as to type conformity, processability or long-term performance characteristics. Therefore, the customer uses the product entirely at their own risk with no guarantee.

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.