



NoriGlass TPI

3-Component Glass Decorating Ink – silicone free

Area of Application and General Characteristics

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

This organic screen printing ink system provides very high resistance to aqueous household cleaners, hand and machine dishwashing detergents as well as to chemicals and solvents like aliphatic and aromatic hydrocarbons, alcohols, greases, oils and hydraulic fluids.

Finish

Glossy

Color Shades

HF = halogen free

Basic Colors for the Proell Matching System	093 Colorless HF	321 Bright Red HF	665 Green HF
	102 Citron HF	368 Red Transparent HF	945 White HF
	112 Yellow HF	412 Pink Transparent HF	948 Black HF
	171 Yellow Transparent	429 Red Violet HF	
	225 Orange HF	566 Blue Transparent HF	
High Opaque Colors	930 Titanium White HF	(see separate Technical Information)	
	960 Deep Black HF	(see separate Technical Information)	
Special Colors	734 Silver 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 TPI has to be mixed homogeneously step by step with **10 % Hardener 004** (mix thoroughly with stirrer, at least 2 min) and then **3 % Adhesion Promoter 102** and the intended percentage of Thinner S 402.

Optimal processing with stirrer (blade agitator or dissolver), with a subsequent ink rest time of 10 minutes.

Pot Life

The mixture of ink, hardener, and adhesion promoter must be processed within 8 hours.

Even if the ink still seems to be processable, an exceeding of the pot life will impair the adhesion and chemical resistance of the printed ink film.

Consequently, the quantity of the mixture should be limited in accordance with the amount required for the printing job.

This time span refers to a closed container and an ambient temperature of approx. 20 °C (68 °F). Higher temperatures accelerate the curing process.

Thinning

Thinner S 402 Addition: 10 – 20 %

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Mesh

All usual screen printing fabrics and mesh counts are suitable.

The following mesh counts are recommended: 100-40Y threads/cm (255-40 threads/inch)
120-34Y threads/cm (305-34 threads/inch)

Stencil

Solvent resistant emulsions must be used. Excellent results during long production runs are achieved by using Pröll emulsion Norikop 10 HQ.

Drying / Stoving

Depending on your requirements and specifications we recommend following three drying scenarios:

Drying: 3 min / 80 °C (176 °F)

Stoving: 30 min / 140 °C (356 °F)

If printing several layers it is sufficient to dry each layer for 3 min at 80 °C (176 °F).

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 TPI is not recommended for long-term outdoor use.

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 102 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 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 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.

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.