



Matt Lacquer ATM 1

Area of Application and General Characteristics

Matt Lacquer ATM 1 is a solvent based formable matt lacquer system for overprinting polycarbonate film instrument (e.g. speedometer panels).

Printed films are excellent deep-drawable by vacuum and high pressure forming. The matt lacquer can be used as well for matting high gloss films made of PC and rigid PVC. The screen printed deep matt lacquer surface has a soft grip and shows good scratch and chemical resistances.

Color Colorless, turbid liquid

Auxiliaries

Hardener Hardener 8125: Recommended quantity of hardener: 6 %
Pot Life: 6 – 8 hours, depending on quantity and room temperature.

Thinner If necessary the lacquer-hardener mixture can be thinned with 5 to 10 % Thinner ATM 090.

Processing of Matt Lacquer ATM 1

Fabrics Polyester fabric of 77 threads/cm (195 threads/inch).

Stencil Solvent resistant emulsions must be used. Excellent results during long production runs are achieved by using Pröll emulsion Norikop 2 FP.

Drying

Matt Lacquer ATM 1 is a physically curing, printable lacquer which dries by evaporation of solvents. Curing also occurs in the stack.

To speed up this process, warm air jet dryers are a **MUST!** Drying on racks is not suitable as solvents will penetrate the PC film and these retained residual solvents will cause problems as described under "Post Curing".

Drying Hints

When using a 3-section dryer, a temperature of 70 °C (158 °F) is recommended for the first two sections.

The last section is to cool the prints.

The drying results depend on the buildup of the ink to be overprinted, thickness of the lacquer and performance of the dryer.

Post Curing

For further processing of printed films, sufficient evaporation of solvent residues must be guaranteed.

Solvent residues can cause damage during climate resistance tests and/or use of the finished parts.

Post curing on PC materials should be done in an oven with adequate ventilation and air circulation.

Post curing conditions:

75 – 90 °C (167 – 194 °F), for one to two hours, depending on application.

Despite the total curing which takes place under these conditions, the lacquer remains flexible enough for the high pressure forming process normally used in producing three dimensional instrument gages.

Cleaning

Clean screen and equipment with UNI-REIN A III.

Shelf Life

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

We recommend not storing Matt Lacquer ATM 1 at temperatures below 20 °C (68 °F). On this condition the product's quality is assured during the shelf life as stated on the label. This applies to original, unopened cans.

Important

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 before performing any production runs. Materials that are supposed to be identical may vary from manufacturer to manufacturer and even from batch to batch. Substrates and printing inks may have been treated with or contain sliding agents, antistatics or other additives which may impair the adhesion of the lacquer.

In addition, please refer to our technical leaflet "General Information on Screen Printing Inks" which may be downloaded from our website www.proell.de, click Download ⇒ Screen Printing Inks ⇒ General information on screen printing inks.

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