Matt Lacquer ATM WB 6
UV stabilized, scratch resistant
Water-based Screen Printing Lacquer

Area of Application and General Characteristics

Matt Lacquer ATM WB 6

- is a water-based, formable matt lacquer system
- was developed for flat and formed speedometer panels made of printed PC films
- is UV stabilized for higher resistance against sun-light
- shows good scratch resistance
- is deep matt and shows a soft grip
- is suitable for overprinting Pröll IMD/FIM ink system NORIPHAN® HTR N
- can also be suitable for overprinting other dial inks after pre-test

Color
Colorless, milky liquid

Processing of Matt Lacquer ATM WB 6

Mix Ratio
100 parts by weight Matt Lacquer ATM WB 6
   1 part by weight Defoamer L 54131
   5 parts by weight Crosslinker WB 002

This mixture must be stirred homogeneously to ensure good levelling, adhesion and scratch resistance of the printed film.

Pot Life
At least 24 h, depending on quantity and room temperature.

Fabrics
77-48 threads/cm (195 threads/inch) to 120-34 threads/cm (305-34 threads/inch)

Stencil
Water resistant emulsions must be used. Excellent results during long production runs are achieved by using Pröll Diaozo-UV-Polymer Emulsion Norikop 10 HQ. Sufficient drying of the emulsion is essential, residual moisture before exposure reduces print run resistance.

Printing
The relative humidity in the printing room should be 50 – 60 %.
The screen should be wet with water before printing starts. Immediately after printing, the stencil has to be filled with Matt Lacquer ATM WB 6 again. Handling Matt Lacquer ATM WB 6 in this way provides trouble-free production.
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Drying
Matt Lacquer ATM WB 6 dries physically by evaporation of water. Crosslinking (chemical curing) also occurs when the prints are stacked. Final scratch resistance is achieved after 48 hours. For the acceleration of the scratch resistance a box oven drying for 30 min. at 80 – 90 °C (176 – 194 °F) is recommended. This post-drying can also influence the formability and should be tested in general.

Drying Hints
With a multi-section tunnel dryer 80 °C (176 °F) is recommend. A final cooling section is required. The drying test results depend on the buildup of the previously printed ink layers, thickness of the lacquer and performance of the dryer.

Conditioning
The lacquer remains flexible for 3D forming even if it is completely cured. The process window for best forming results (time-span between printing and forming) has to be elaborated with the completed printing sequence and own machine/tool-conditions.

Cleaning of Screens and Utensils
During printing the stencil can be washed with Aqua-Jet® Liquid Cleaner L 47603 if necessary. Lacquer not moved while printing should be put back into the printing area, the border area should be kept humid. After printing the Lacquer should be cleaned immediately, before it is too dry. Screen and tools are sprayed with Aqua-Jet® Liquid Cleaner L 47603 and cleaned subsequently. Solvent free Cleaner Concentrate 6953 is also very good for cleaning in pure or diluted condition (see its own Technical Information). Strongly dried lacquer can be removed with solvent based Cleaner 6614.

Shelf Life
The shelf life stated on the label assures the quality of the product. It refers to unopened original cans stored in a dry place at temperatures between 5 °C (40 °F) and 25 °C (75 °F). Please protect against freezing!

Important
Allow the lacquer 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, 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.).