

INKJET PRINTABLE VARNISH

(Preliminary Version)



Technical Data Sheet

UV screen printing inks

1. FIELD OF APPLICATIONS:

UV absorption clear lacquer for the industrial screen printing of recordable media such as CD-R, CD-RW and DVD -R or DVD-RW which has been developed as an absorption layer for the ink-jet printing with Piezo- and Bubble-Jet printers. Since substrates various in printability, preliminary trials are essential to determine the suitability for the intended use.

2. PROPERTIES:

The surface of the absorbent layer shows very good adhesion properties and durability while printed with water based ink-jet inks. Layer is suitable for printing high resolution pictures (up to 2400 dpi) with excellent brilliance of the colours. The ink-jet colours are very quickly wipe resistant and tack free, depending on the saturation and resolution of the printer.

In case a white surface is required, a white base has to be printed in advance.

3. PRODUCTS:

Absorption Lacquer, clear 972 UV 0270
Absorption Lacquer, yellowish tint 972 UV 0272

Pre-printing White 900 UV 1369 CD

4. STENCILS / PRINTING EQUIPMENT:

Screen Printing meshes of 120-31 threads / cm to 140-31 threads/cm or 305 threads / inch to 350 threads / inch are suitable. All commonly used screen printing machines can be used. Squeegees with a shore hardness of 70° – 80° Shore A (rectangular shape) can be used.

4.1. Precaution

Before processing, especially after a longer storage period, the absorption lacquer should be sufficiently homogenized by a dissolver.

4.2 Curing Conditions

The absorption lacquer can be cured under medium pressure mercury vapour UV lamps with a power of at least 150 – 160 W/cm. The required energy output is around 200 – 300 Millijoule/cm².

UV curing is followed by a 12 hour post-cure effect after which full curing is reached and the lacquer film has reached its final properties.

Low radiation intensity, extreme machine speeds or excessive film thickness may have a negative influence on the curing properties and adhesion properties, as well as on the printability

5. CLEANING:

Screens, squeegees as well as other working materials can be cleaned with the RUCO screen cleaner 32335. If cleaning is not performed by fully automatic cleaning equipment, protective gloves must be worn.

Cleaning liquids that are contaminated with UV products should not be used for the washing of working materials that were used for conventional screen printing inks. Solvents that contain UV residues are not suitable for reclamation and have to be treated as separate waste.

Cleaner: UR 32 335
Cleaner for cleaning equipment WR 100VR 1240C
Bio degradable cleaner BR 100VR 1272

6. SHELF LIFE:

A shelf life of 6 month is guaranteed when storing the ink at room temperature, around 21°C and in original packaging, in a dark storage room. At higher storage temperature the shelf life will be reduced.

7. PRECAUTIONS:

UV inks may cause irritation and can increase the sensitivity of the skin, possible leading to hypersensitivity.

For further information on the safety, storage and environmental aspects concerning these products please refer to the Material Safety Data Sheet (MSDS).

Additional technical information may be obtained from our Technical Application Department.

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