960 UV 395

Technical Data Sheet **UV overprinting lacquer**

1. APPLICATION FIELDS:

UV curing overprinting lacquer in order to achieve protective lacquered films with high gloss, flexibility and high resistance against different substances (alcohol, thinned acids, thinned lyes, cleaning liquids, hygiene products). Suitable for Optical Discs such as offset printed OD, polycarbonate and polyolefines.
Substrates may differ in their chemical structure or method of manufacture. A test for suitability must always be carried out before printing.

2. CHARACTERISTICS:

The medium viscosity UV screen printing lacquer is constitutionally free from toxic elements, solvents and monomers. The lacquer has very good flowing properties and allows the manufacture of thin and very smooth lacquer films. Due to its very good wetting property smooth lacquer surfaces can also be achieved with the decoration of large areas printed with UV screen printing inks.

3. PROCESSING INSTRUCTIONS:

3.1 Pre-treatment:

Non pre-treated polyolefine materials need to be corona pre-treated prior to printing.

3.2 Stencils / Printing Equipment:

Screen printing meshes between 150-31 threads/cm and 180-27 threads/cm are suitable for printing with UV inks.
However, printing and approval of the colour is recommended. The 960 UV lacquer can be used with all screen printing machines with screen printing stencils currently used for industrial applications. Any acrylic acid ester resistant squeegee material may be used.

3.3 Curing Conditions:

The varying UV absorption of the individual colours results in a range of curing properties depending on colour and opacity. The 960 UV lacquers can be cured by the use of medium pressure mercury vapour lamps (at least 160 W/cm). The optimum energy output is 100 - 250 Millijoule/cm^2. UV curing is followed by a 12 hour post-cure phase after which the ink film is fully cured and has its final properties.
However, it must be noted, that low radiation intensity, excessive machine speeds or excessive film thickness can have a negative influence on the curing properties and adhesion.
Un-cured prints are considered a hazardous waste. Therefore, it is recommended to cure misprints under the UV lamp as a matter of principle. After curing, spoilage can be disposed by conventional methods and may be incinerated without causing any difficulties.

3.4 Viscosity:

The lacquer is ready to use.

4. CLEANING:

Screens and squeegees as well as other working materials can be cleaned with the RUCO screen cleaner 32 335. 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 with conventional screen printing inks.
Solvents that contain UV residue are not suitable for reclamation and must be treated as a separate waste.

Universal Cleaner	UR		32 335
Cleaner for cleaning equipment	WR	100 VR	1240C
Bio Cleaner	BR	100 VR	1272

5. SHELF LIFE:

A shelf life of 12 months is guaranteed when storing the inks at 21°C and in the original packing container. At higher storage temperatures the shelf life will be reduced.

6. IMPORTANT NOTICE:

All UV inks and especially the transparent none-pigmented products like lacquer do already polymerisate (react) under the influence of UV radiation, present daylight and in the spectrum of certain neon lamps. Therefore the influence of these radiation sources on the lacquer needs to be prevented.

7. PRECAUTIONS:

UV inks may cause irritations and can increase the sensitivity of the skin, possibly leading to hypersensitivity. Therefore, the use of disposable gloves and protective goggles is strongly recommended.
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.

A.M. RAMP & Co. GmbH
Lorsbacher Strasse 28
D-65817 Eppstein

Tel: +49 (0) 6198-304-0 FAX: +49 (0) 6198-304-287
E-Mail: info@ruco-inks.com
www.ruco-inks.com

