

# OVERPRINTING LACQUER

## 960UV161

### Technical Data Sheet

### UV Screen printing inks

#### 1. APPLICATION FIELDS:

UV curing overprinting lacquer in order to achieve protective lacquered films with high gloss, flexibility and high resistance against different substances, Suitable for substrates made from **polycarbonate** and **polyolefins**. 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 lacquer has 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.

The lacquer can be used for mixtures with micro-encapsulated fragrances.

The lacquer is constitutionally free from toxic elements and solvents.

The used raw materials also comply with the limits of metal elements stipulated by the *actual EEC regulation EN 71 (Safety of Toys), part 3* (Migration of Certain Elements).

#### 3. PROCESSING INSTRUCTIONS:

##### 3.1 Pre-treatment:

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

##### 3.2 Stencils / Printing Equipment:

Screen printing meshes between 140-34 threads/cm and 165-27 threads/cm are suitable for printing with UV inks.

The 960UV161 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 960UV161 lacquer can be cured by the use of medium pressure mercury vapour lamps (at least 160 W/cm). The optimum energy output is 80 - 120 millijoule/cm<sup>2</sup> (measured by Kühnast- UV Intergrator under lab condition). UV curing is followed by a 12 hour post-cure phase after which the ink film is fully cured and has its final properties.

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. The viscosity is adjusted at 23-26 dPas.

#### 4. CLEANING:

Screens and 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 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	32335
Cleaner for cleaning equipment	100VR1240C
Bio Cleaner	100VR1272

#### 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. 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 Product Management 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](mailto:info@ruco-inks.com)  
[www.ruco-inks.com](http://www.ruco-inks.com)

