

900 UV 4346

BRILLIANT SILVER



Technical Data Sheet

UV screen printing inks

1. APPLICATION FIELDS:

High gloss Brilliant Silver suitable for Screen Printing (Direct Printing) on PVC, pre-treated Polyethylen (PE) and Polypropylen (PP) also on paper and cartontage.

Substrates may differ in their chemical structure or method of manufacture. A test for suitability must always be carried out before printing. Antistatic, Mould Release Agents and Slip Additives may have negative effects on adhesion, and should be detected and removed prior to printing.

2. CHARACTERISTICS:

This high reactive, low viscosity Brilliant Silver 900 UV 4346 with leafing pigments is excellent in brilliance and metallic effects. The leafing pigments are of low structure, through which the metallic effects are high qualified.

The raw materials used meet with the limits stipulated by the EEC regulation EN 71 (Safety of Toys), part 3 (Migration of Certain Elements) of December 1994

3. RANGE OF COLOURS:

1 K – Brilliant Silver 900 UV 4346

4. ADDITIVES:

1 K – Brilliant Silver is ready for usage.

5. PROCESSING INSTRUCTIONS

5.1 Pre-treatment:

Pre-treatment of polyolefines (PE/PP) must be performed by Flame Treatment or CORONA-discharge in order to insure the adhesion of the UV screen printing ink to the substrate. In case of PE, surface tension needs to be at least 42 mN/m (Dynes/cm), in case of PP at least 52 mN/m (Dynes/cm).

5.2 Stencils / Printing Equipment:

Screen printing meshes between 120 –31 threads/cm or Rotamesh[®] RM 215/21% or Screeny HS/HV are suitable for printing with the UV screen printing ink.

Finer meshes can not be used. The Brilliant Silver can be used with all screen printing machines and screen printing stencils currently used for industrial applications.

Any acrylic acid ester resistant squeegee material may be used.

5.3 Curing Conditions:

The Brilliant Silver 900 UV 4346 can be cured by the use of medium pressure mercury vapour lamps (at least 160 W/cm). The necessary energy needed is 250-300 mJ/cm². 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.

6. 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

7. SHELF LIFE:

A shelf life of 6 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.

8. 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.

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