

## LABITEX UV 403 S

### Product description:

LABITEX UV 403 S is the standard gloss UV-curable varnish for the flat screen printing. Could be supplied with different viscosities depending on user's needs (60-140 sec DIN-4).  
ITX-free. Contains silicone.

### Physical characteristics:

Flash point:	> 100°C
Solid content:	100% <b>VOC-free</b>
Viscosity (20°C):	90±9 (DIN-4)
Gloss:	> 90
Slip angle:	< 5°
Curing speed:	35 m/minute with lamp 60 W/cm (laboratory conditions)
Hot stamping:	No
Glueability (special glue):	No
Overprinting:	No

### Product features:

- High slip
- Good gloss

### Substrate:

Paper	***	*** Perfect suitable
Cardboard	***	** Suitable
Non-absorbent substrates <sup>1</sup>	X	* Tests recommended
Treated non-absorbent substrates <sup>1</sup>	*	X Not suitable

<sup>1</sup>Label paper, laminated cardboard and synthetic substrates ( PP, PE, PVC, OPP and etc.)

### Application:

- Equipment: Automatic or manual flat silk screen printing press. Mesh 100-165 line/cm depending on the viscosity.

The machine should be adapted to work with the UV materials, including rollers and hoses. The lamps and reflectors should be clean and changed regularly in order to cure UV-varnish properly.

- Film thickness: Strongly depends on the absorbency of the substrate and the screen mesh.

### Suitability of the UV coating for different UV curing dryers:

Hg <sup>1</sup>	O <sub>3</sub> -free <sup>2</sup>	Fe	Ga	LE-UV <sup>3</sup>	LED 365	LED 395 <sup>4</sup>	<sup>1</sup> standard medium pressure mercury UV lamp
Yes	No	Yes	No	No	No	No	<sup>2</sup> Ozone-free mercury UV lamp
							<sup>3</sup> Iron doped Ozone-free, like H-UV etc.
							<sup>4</sup> including LED-UV dryers with wave lengths 385 and 405 nm.

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## UV COATINGS APPLICATION GENERAL GUIDELINE

- Application viscosity:** As supplied. It is possible to heat the UV coating to reduce the viscosity and improve the leveling (do not heat UV coating over 40°C). The viscosity is strongly depends on temperature.
- Polymerization:** Adequate UV curing is required for the coating. Cure speeds will be dependent upon film thickness, substrates and the type/condition of the UV curing equipment.
- Equipment clean-up:** Wash, suitable for UV coatings.
- Coating and inks:** It is not recommended to varnish oil based offset paints based on the following unstable pigments: Warm Red, Rhodamine, Purple, Purple, Blue Reflex, Blue 072. In this case, use special resistant colors.
- During the application on:**
- Inks, containing waxes or silicones;
  - Water-based and conventional OPV not designed as special primers.;
  - Prints, passed through infra-red dryers,
  - Other substrates with surface tension below 38 Dyn/cm.
- Could be problems with substrate wetting and adhesion.  
The UV coating should be applied on thoroughly dried inks. In case of the conventional offset inks the thorough drying could takes 12-48 hours and more, depending on ink, substrate, film thickness and others printing settings.
- Prior tests are recommended!**
- Storage:** The recommended storage temperature is 18-22°C. Guaranteed shelf life is 12 months in closed original packaging. Avoid direct sunlight.
- Safe handling:** Avoid any contacts with skin and eyes. All works should be proceeded in the ventilated working area. For more information, please, see the MSDS

### **STIR COATING WELL BEFORE USE!**

**Notes:**

- All information provided in this Technical Data Sheet (TDS) including the recommendations for application is based on our current knowledge and experiences.
- The information about technical specifications (such as slip angle or reactivity) is based on our examinations under laboratory conditions and the mentioned values can differ from the practice.
- This document is provided for informational purposes only and do not release users from carrying out their own tests and trials.
- We reserve the right to change product properties according to the newest requirements of technical progress, amendments and additions to the list of restricted raw materials. These changes do not bring negative impact on the technical characteristics of the product.

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