

TECHNICAL DATA SHEET

VARNISHES – UV CURABLE FLEXO

DESCRIPTION A range of UV curable flexo varnishes for general purpose use including labels and packaging. Offering fast drying speed and excellent resistance properties.

PROPERTIES Fast cure
Low viscosity
Very good chemical and product resistance
Very good water resistance
Good adhesion
Other specific properties as per range list below

All items on this list are Benzophenone, MBP, OHBP, BDK, ITX-free

Please see list for suitability for overprinting and foil blocking

Blockable varnishes are not suitable for direct thermal

Optimal cure and resistance properties will be seen 24 hours after printing. In order to achieve solvent and chemical resistance, the following factors are important: -

1. even layer of varnish
2. good flow out
3. good curing
4. optimal varnish / material combination

Unless the printed layer is a barrier to migration and there is no possibility of set off to the unprinted (food contact) surface, **standard varnishes are not intended for food packaging specifications.**

For applications where the material is not a barrier, or set off is possible, we recommend the use of low migration inks & varnishes (see separate list). Contact us for further details.

It must also be mentioned that the Printer/Converter and Packer/ Filler has legal responsibility to ensure compliance with the relevant legislation for food packaging.

SUBSTRATES Coated paper and board
Top coated thermal paper
Treated/primed polyethylene
Treated/primed polypropylene
Aluminium foils
Polyester, PVC

Other materials after testing. Please ask our laboratory, and/or send material samples, for more detailed advice and recommendations.

APPLICATION **Stir well before use**

Rollers EPDM, UV lamps minimum 80 w/cm
Anilox 120-160 l/cm, anilox volume 4-8 cm³/m²



RANGE

	<u>Standard</u>	<u>Premium</u>
UV Flexo Gloss Varnishes		
High Gloss	EL180 [‡]	EL157 ⁽¹⁾
High Rub/Slip Gloss	EL056	EL197 ⁽²⁾
High Rub/Slip OB Gloss		EL059 ⁽³⁾
High Gloss Foil Blockable	EL158 [‡]	EL239 ⁽¹⁾
UV Flexo Matt Varnishes		
	<u>Silicone-free</u>	<u>Contains silicone</u>
Satin	EL370 [‡]	EL366
Matt	EL371 [‡]	EL367
Supermatt	EL372 [‡]	EL368

<u>Other Varnishes</u>	<u>Gloss</u>	<u>Matt</u>
Shrink Sleeve		EL254
Shrink Sleeve High Slip	EL169	
Anti-Static	EL187	EL189

1. Whiter coating
2. Glossier
3. Proctor & Gamble (P&G) approved product

Please ask the laboratory for advice on low odour and/or low migration varnishes.
Please see separate data sheets for our range of UV letterpress, duct and lithographic, and screen applied varnishes.

‡ - Gloss meter readings (60° angle Minigloss) as below: -

Gloss readings achievable using 6.5cm ³ /m ² anilox	Unvarnished Print	EL180/EL158 Gloss	EL370 Satin	EL371 Matt	EL372 Supermatt
On gloss paper	49-51	85-90	6-8	4-6	3-5
On PE/PP	78-80	88-94	32-35	23-25	11-13
Over Ink	-	86-93	19-23	14-17	9-11

AUXILIARY PRODUCTS

RLA301 UV Slip/Flow Agent (silicone containing) (add up to 5% as required)
Do not add in Foil Blockable / Overprintable varnishes
 RLA313 UV Thinner/Reducer (add up to 5% as required)
 RLA367 UV Defoamer (Silicone-containing) (add up to 1% maximum)
Do not add in Foil Blockable / Overprintable varnishes
 RLA379 UV Defoamer (Silicone-free) (add up to 1% maximum)
 RLA350 UV Wash-up

STORAGE & HANDLING

Store at temperatures between 5°C and 25°C.
Protect from sunlight and frost.
In unopened containers, these items have a shelf life of 12 months.

DISCLAIMER

The information contained in this data sheet is correct to the best of our knowledge. It is intended as a guide only for the optimum use of the named product(s) and is not intended as a warranty or as a specification. This datasheet may not be suitable for combinations with other materials or in processes other than those specifically described. The user should always make their own tests to establish that the product(s) meets their requirements.