

# Technical Data Sheet

## RBC Screenprinting series



### UV Product series

#### RBC2UG series | Screenprinting UV gloss series

Product	Name	Gloss	Visco 21°C DIN 4	Visco 21°C Brookfield (mPa.s)
RBC2UG001	Screenprinting UV non yellowing HV	High	/	800-1000
RBC2UG002	Screenprinting varnish for absorbing substrates	High	N.A.	/
RBC2UG003	Screenprinting UV Embossing varnish	High	N.A.	1300-1600
RBC2UG004	Screenprinting UV all round varnish	High	50-70"	/
RBC2UG005	Screenprinting UV braille for flat bed low viscosity varnish	High	N.A.	N.A.
RBC2UG006W	Screenprinting UV Gloss opaque white	High	N.A.	N.A.
RBC2UG007	Screenprinting UV standard varnish	High	50-70"	/
RBC2UG008	Screenprinting UV Braille for flatbed LV	High	/	8000-10000
RBC2UG009	Screenprinting UV for exterior applications	High	60-90"	/
RBC2UG010	Screenprinting UV for absorbing substrates	High	/	4200-6200
RBC2UG011	Screenprinting UV perfecting varnish	High	50-70"	/
RBC2UG012	Screenprinting UV braille rotation varnish	High	/	900-1400
RBC2UG013	Screenprinting UV for overprinting of digital prints	High	/	850-1150
RBC2UG014	Screenprinting UV low viscosity varnish	High	30-50"	/
RBC2UG015	Screenprinting UV pearlescent varnish	High	/	700-900"
RBC2UG016	Screenprinting UV antislip varnish	Medium	/	4000-6000
RBC2UG017	Screenprinting UV gluable overprintvarnish	High	120-150"	/
RBC2UG018	Screenprinting UV braille varnish for flatbed HV	High	/	12000-15000



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RBC2UG019	Screenprinting UV for absorbing substrates	Medium	/	5000-7000
RBC2UG020	Screenprinting UV for overprinting offset inks	High	120-150"	/
RBC2UG021	Screenprinting UV frost varnish	High	/	1300-1700
RBC2UG022	Screenprinting UV foam varnish	High	/	3000-5000
RBC2UG023	Screenprinting UV high viscosity varnish (in combination with RBC7F001 for sand effect)	Medium	/	1000-1500
RBC2UG024	Screenprinting UV release varnish	High	60-90"	/
RBC2UG025	Screenprinting UV luminescent varnish	High	50-70"	/
RBC2UG026	Screenprinting UV high rub- and scratch resistant	Medium	120-150"	/
RBC2UG027	Screenprinting UV high viscosity varnish	High	90-120"	/
RBC2UG028	Screenprinting UV benzofree varnish	High	100-140"	/
RBC2UG029	Screenprinting UV tixotropic braille varnish	Medium	/	2000-2500
RBC2UG030	Screenprinting UV interference varnish	High	100-140"	/
RBC2UG031	Screenprinting UV embossing varnish	High	300-350"	/
RBC2UG032	Screenprinting UV braille rotation varnish	High	/	700-1100
RBC2UG033	Screenprinting UV for absorbing substrates flexible varnish	Medium	/	4000-6000
RBC2UG034	Screenprinting UV fine pearlescent varnish	Medium	N.A.	/
RBC2UG035	Screenprinting UV braille high reactive varnish	High	/	700-1000
RBC2UG036	Screenprinting UV braille high viscosity varnish	High	/	1000-1500
RBC2UG037	Screenprinting UV braille transparante varnish	High	/	700-1100
RBC2UG038	Screenprinting UV gloss varnish	High	90-120"	/
RBC2UG039	Screenprinting UV antigraffiti exterior varnish	High	90-120"	/
RBC2UG040	Screenprinting UV relief varnish	High	70-100"	/
RBC2UG041	Screenprinting UV braille for flatbed HV	High	/	12000-15000

## RBC2UM series | Screenprinting UV matt series

Product	Name	Visco 21°C DIN4	Visco 21°C Brookfield (mPa.s)
RBC2UM001	Screenprinting UV matt braille varnish for flatbed	/	8000-12000
RBC2UM002	Screenprinting UV matt varnish	/	1500-2500
RBC2UM003	Screenprinting UV stampable matt varnish	/	/
RBC2UM004	Screenprinting UV soft touch for paper and carton varnish	180-210"	/
RBC2UM005	Screenprinting UV floor sticker varnish	/	1000-1400
RBC2UM006	Screenprinting UV matt release varnish	/	2000-3000
RBC2UM007	Screenprinting UV matt braille rotation varnish	/	1500-2000
RBC2UM008	Screenprinting UV rough texture varnish	/	/
RBC2UM009	Screenprinting UV soft touch varnish	80-120"	

## RBC2ULM series | Screenprinting UV Low migration gloss series

Product	Name	Visco din	Visco brookfield
RBC2ULMG001	Screenprinting UV low migration gloss varnish	40-70"	/
RBC2ULMG002	Screenprinting UV Embossing varnish	/	1300-1600

## LED products series

### RBC2LG series | Screenprinting LED gloss series

Product	Name	Visco 21°C DIN4	Visco Brookfield mPa.s
RBC2LG001	Screenprinting LED standard varnish	80-100"	
RBC2LG002	Screenprinting LED embossing varnish	/	1300-1600
RBC2LG003	Screenprinting LED varnish for absorbing substrates	/	/
RBC2LG004	Screenprinting braille varnish for flatbed LV	/	4000-6000
RBC2LG005	Screenprinting LED overprintvarnish LV	60-80"	/
RBC2LG006	Screenprinting LED overprintvarnish HV	100-130"	/

## RBC2LM series | Screenprinting LED matt series

Product	Name	Visco 21°C DIN4	Visco Brookfield mPa.s
RBC2LM001	Screenprinting LED standard matt varnish	N.A.	N.A.

### Properties

- Adhesion:** good adhesion on paper, cardboard, OPP lamination film and a broad series of screen and offset inks. Adhesion on other substrates should be tested prior to printing
- Flexibility:** these varnishes show good flexibility, when bended or folded
- Application:** the varnishes are press-ready to print for screen
- Odour:** The varnishes are low in odour
- Drying/curing:** Quick and safe drying but the surface tension of the film or the substrate should at least be 38 dynes/cm
- Others:** the varnishes can be printed over offset inks

### Mesh

Mesh should be chosen on type of application and on desired effect. In case of doubt contact RBC products. The mesh should be cleaned with standard washing agent RBC7C001 or with our label free washing agent RBC7C002. Both are water dilutable

### Curing speed

#### UV curing

These varnishes are formulated to cure under a dryer with one medium pressure mercury 120W/cm lamp at 30-40 metres/min. The better the UV drying, the better the adhesion on the substrate. 250 mJ/cm<sup>2</sup> is recommended.

The curing depends on the kind of UV curing unit (reflectors, age and power of the UV lamps, the printed inklayer thickness and the belt speed of the UV curing unit). In certain cases the flow and the gloss can be improved by passing prints under IR lamps prior to UV curing.

#### LED curing

These varnishes are fomulated to cure under a dryer with 16W/cm<sup>2</sup> lamps at 30-40 meters/min. The better the LED drying, the better the adhesion on the substrate. 250mJ/cm<sup>2</sup> is recommended.

The curing depends on the kind of LED curing unit, the printed inklayer thickness and the belt speed of the LED curing unit. In certain cases the flow and the gloss can be improved by passing prints under IR lamps prior to Led curing.

### Post Curing

The adhesion of the varnish is best evaluated after 24 hours. In this time interval, a post curing effect takes place during which the varnish cools down and the UV/LED chemical termination reaction happens, resulting in better adhesion.

## Safety

UV/LED varnishes are formulated free of heavy metals and comply with EN 71/3 standard. These varnishes are REACH compliant and free from SVHC substances (Reach annex XIV) and substances mentioned on the latest update of the candidate list. Please consult the MSDS.

## Storage and shelflife

When the UV/LED varnish is stored between 15 and 20°C in its closed original can, shelf life will be minimum 12 months from date of manufacture. Varnish taken from the press should not be returned to the original container, but stored separately to avoid contamination of unused UV/LED varnish.

## Remarks

- a. All surfaces must be free from grease, clean and dry before coating.
- b. The surface to be printed should at least be 38 dynes/cm. Any tension lower than 38 will inevitable result in a poor or no adhesion. We strongly recommend that the surface tension be measured prior to printing in order to avoid claims from the end user of the printed product.
- c. The surface tension of the cured film with non gluable varnish is  $< 34$  mN/m
- d. We also strongly recommend, before starting the varnishing, to check the print for bleeding resistance, as certain pigments in the inks tend to bleed when overlacquered with UV/LED varnishes.

## Packaging

- 5 kg jerrycans/buckets
- 10 kg jerrycans/buckets
- 20 kg jerrycans/buckets
- 200 kg barrels
- 1000 kg IBC

*For more information and technical support. Please contact RBC-products.*

*Information on this TDS sheet is meant for guidance. We strongly recommend to test our inks and varnishes before applying them into production.*