



NewV lac[®] gloss for UV curing

For coating unit

NewV lac gloss varnishes offer brilliance as well as high mechanical stability and chemical resistance to protect and to upgrade the printed product.

NewV lac gloss varnishes listed below are suitable for conventional mercury vapour lamps in off-line and in-line coating application. They can be used over water based primer, they have high reactivity, even surface, very good running characteristics, low tendency to yellowing and low dry back effect.

These varnishes do not include volatile solvents, which means, their application does not lead to VOC emission. They are also ITX free.

Dependent on the requirements there are varnishes in the portfolio with benzophenone content and without. Benzophenone is an effective photoinitiator, supports fast and good curing. In case your customer's requirement does not exclude the benzophenone content, we recommend you the following varnishes:

Name	Description	Sales Code	Gloss ¹⁾	Viscosity ²⁾			Slip ¹⁾	Adhesion ¹⁾
				DIN 4mm [23°C]	B4 cup [30°C]	Zahn3 [25°C]		
NewV lac gloss	Standard gloss varnish. Includes benzophenone.	60UC1100	9	45	45	20	6	8
NewV lac gloss	Standard gloss varnish with improved slip properties. Includes benzophenone.	60UC1111	9	45	45	20	7	8
NewV lac gloss high slip	Gloss varnish with high slip properties. Includes benzophenone.	60UC1112	9	40	45	20	9	6
NewV lac gloss high slip	High slip varnish with increased viscosity. It gives good gloss results on more absorbent substrates. Includes benzophenone.	60UC1110	9	50	45	25	9	6
NewV lac gloss high slip	High gloss varnish with high slip properties. Includes benzophenone.	60UC1121	10	45	40	20	9	10
NewV lac gloss stampable	Glueable and foil stampable gloss varnish with minimized slip properties. Recommended also for thermal transfer overprinting - prior tests are needed. Includes no silicon. Includes benzophenone.	60UC1124	9	50	45	25	0	n.a. ³⁾
NewV lac gloss flexible	Flexible gloss varnish. Includes benzophenone.	60UC1117	9	45	40	20	7	10
NewV lac gloss flexible	Flexible gloss varnish with very good slip properties and increased viscosity. Includes benzophenone.	60UC7128	9	60	55	25	8	9
NewV lac gloss flexible high slip	Flexible gloss varnish with high slip properties. Includes benzophenone	60UC1127	9	50	50	25	9	10
NewV lac gloss high adhesion	High gloss, high adhesion varnish. Includes benzophenone.	60UC1120	10	45	50	20	7	10

¹⁾ On a scale from 1 to 10 (1=low, 10=high)

²⁾ Viscosity measurement tolerance ±5 sec.

³⁾ Not applicable because of the strong adhesion between the tape and the varnish.

In case your customer prefers to use benzophenone-free products, we recommend the following gloss varnishes. They are **all benzophenone-free**.

Name	Description	Sales Code	Gloss ¹⁾	Viscosity ²⁾			Slip ¹⁾	Adhesion ¹⁾
				DIN 4mm [23°C]	B4 cup [30°C]	Zahn3 [25°C]		
NewV lac gloss	Standard gloss varnish with very good gloss results.	60UC1200	9	45	45	20	6	8
NewV lac gloss	Standard gloss varnish with very good gloss results and higher slip properties.	60UC1211	9	45	45	20	7	8
NewV lac gloss	Gloss varnish with very good slip properties.	60UC1320	9	50	50	25	8	6
NewV lac gloss high slip	Gloss varnish with high slip properties.	60UC1321	9	45	50	20	9	6
NewV lac gloss	Gloss varnish with increased viscosity. Specially recommended for more absorbent substrates.	60UC1230	9	75	75	30	6	8
NewV lac gloss high viscosity	High viscosity, high gloss varnish, specially recommended for more absorbent substrates.	60UC1250	10	100	100	50	6	8
NewV lac gloss stampable	Stampable varnish with minimized slip properties. Recommended also for thermal transfer overprinting - prior tests are needed. Includes no silicon.	60UC7324	9	40	35	20	0	n.a ³⁾
NewV lac gloss stampable	Stampable varnish with increased viscosity and reduced slip properties. Recommended also for thermal transfer overprinting - prior tests are needed. Includes no silicon.	60UC1234	9	65	65	30	1	n.a ³⁾
NewV lac gloss stampable	Stampable varnish with increased viscosity. Recommended also for thermal transfer overprinting - prior tests are needed. Includes no silicon.	60UC1235	9	65	65	30	6	n.a ³⁾
NewV lac gloss flexible	Flexible varnish with good slip properties and reduced viscosity.	60UC1217	9	35	35	20	8	10
NewV lac gloss flexible	Flexible high gloss varnish with good slip properties.	60UC1227	10	45	45	20	7	10
NewV lac gloss flexible high slip	High gloss, high slip varnish designed for lightweight plastics (eg. PET, self-cling stickers).	60UC2227	10	50	45	20	10	6
NewV lac gloss flexible	Flexible high slip, high gloss varnish with optical brightener for brighter colours. Especially recommended when there is no, or only a small amount of optical brightener in the substrate.	60UC1229	10	45	45	20	7	10
NewV lac gloss high adhesion	High slip varnish, designed for non-absorbent substrates. Exhibits very good adhesion on plastics and PE coated /metallized paper/board.	60UC2220	9	55	55	25	10	9
NewV lac gloss high resistance	High gloss varnish, with increased viscosity. Developed for labels which need to have high alkali, oil and acid resistance.	60UC9230	10	75	75	30	10	9
NewV lac gloss	Benzophenone-derivate free varnish with very good gloss results and decreased slip.	60UC1301	9	50	50	20	4	6
NewV lac gloss stampable	Stampable, benzophenone-derivate free varnish with very good gloss results. Includes no silicon.	60UC1304	9	50	50	20	1	n.a ³⁾
NewV lac gloss high slip	Benzophenone-derivate free high slip varnish with very good gloss results.	60UC1300	9	45	40	25	9	10

¹⁾ On a scale from 1 to 10 (1=low, 10=high)

²⁾ Viscosity measurement tolerance ±5 sec.

³⁾ Not applicable because of the strong adhesion between the tape and the varnish.

Substrates

- Coated papers and cardboards
- Metalized substrates
- Plastic substrates such as PE, PET, PP, OPP, BOPP, PVC, etc.

In case of plastic substrates minimum 38 dyne/cm surface tension is required to achieve good adhesion. By the reason of the quality differences between the available plastic substrates, we recommend to conduct test before starting the commercial printing.

Application

Rollers	EPDM or nitrile	
Anilox	Lines/cm	80 - 180
	Cell volume	6 - 16 cm ³ /m ² *
		Depending on the substrate

Stir well before use!

*Please consider that the quality of the dried varnish layer depends on the substrate surface as well. Highly absorbent papers and cardboards can cause insufficient curing, lower gloss values, poor slip properties and rub resistance problems.

Inks containing pigments with weak fastness properties, as well as mixtures from these colours, may change shade after UV coating.

Applying UV varnish on a non-sufficiently dried ink layer can cause trapping problems. The result can be not even surface, pin-holing, the well-known "orange peel effect", or the poor adhesion to the ink layer.

Stampable varnishes are recommended for hot- and cold-foil stamping, UV overprinting and for most thermal transfer overprinting applications. But based on the different thermal transfer printers available on the market, we recommend carrying out a test before the commercial print run.

Primer is needed in case of applying UV varnish on conventional ink layer. We recommend our water based ACRYLAC primer for these applications. Please find more information in the *technical information sheet 50C032* for coating unit primers.

For further application information please read our technical information sheet *50.G.001 UV curing inks and varnishes for offset printing - Directions for use*.

Auxiliaries

For information please read our technical information *50.A.002 NewV sup Auxiliaries for UV varnishes*.

Food and confectionery packaging

The products listed above are not suitable for printing primary food packaging or secondary packaging where the primary layer is not a barrier against migration of substances from the printed layer to the packed product. More information on the subject of packaging for food, cosmetics, pharmaceutical products, tobacco can be found in the information sheet *50.G.002 NewV for food packaging*. Please also find information on the webpage of the European Printing Ink Association: www.eupia.org.

In case you are interested in UV varnishes for the applications mentioned above, please contact us for recommendations.

Classification

Safety data sheet is available on request.

Shelf life

The minimum shelf life of these products is 12 months from the production date if the container is not opened. But dependent on the storing and handling conditions, they can be usable much longer. For extending the warranty period, please contact our sales representatives.

Further information: Store between 5 - 25°C. Higher storage temperature may reduce shelf life. Protect from frost and sunlight. The cans need to be closed back immediately after usage.

Packaging

25 kg one-way can

200 kg one-way drum

1000 kg one-way container