Technical Information

50.C.001 | Energy-Curing Systems | UV Coatings, Lacquers, Varnishes, Primer



[®]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, have high gloss, high reactivity, even surface, very good running characteristics and low tendency to yellowing.

NewV lac varnishes do not include solvents, which means their application do not lead to VOC emission. They are ITX free and with two exemptions also benzophenone free.

We offer you the following UV curing gloss varnishes with different properties:

Name	Description	Sales Code	Gloss	Foil	Viscosity ¹⁾	Slip	Adhesion
NewV lac gloss	Standard high gloss varnish that can be used off- line and in-line over water based ³⁾ primer with minimal dry back properties. Includes benzophenone.	60UC1100	+++	X ²⁾	45 +/-5	++	++
NewV lac gloss high slip	High gloss varnish with high slip and minimal dry back properties. Can be used off-line and in-line over water based ³⁾ primer. Includes benzophenone.	60UC1111	+++	X ²⁾	45 +/-5	+++	++
NewV lac gloss	Exhibits excellent flexibility and non-yellowing properties along with good levels of slip. Can be used off-line and in-line over water based ³⁾ primer with minimal dry back effect.	60UC1200	+++	X ²⁾	45 +/-5	++	++
NewV lac gloss high slip	Exhibits excellent flexibility and non-yellowing properties along with increased levels of slip. Can be used off-line and in-line over water based ³⁾ primer with low dry back effect.	60UC1211	+++	X ²⁾	45 +/-5	+++	++
NewV lac gloss luminescent	Offers very good gloss level with strong blue luminescent properties.	60UC1220	+++	х	60 +/-5*	++	+++
NewV lac gloss blockable/TTR	High gloss varnish, suitable for hot foil stamping. Conditionally recommended for thermal transfer overprinting, prior tests are needed.	60UC1234	+++	X ²⁾	60 +/-5	+	++
NewV lac gloss blockable/TTR, high slip	Gloss varnish, offers excellent levels of slip whilst exhibiting good hot foil stamping and thermal transfer properties.	60UC1235	++	X ²⁾	65 +/-5	++	++
NewV lac gloss high viscosity	High viscosity varnish, specially recommended for more absorbent substrates.	60UC1250	+++	X ²⁾	100 +/-5*	++	++
NewV lac gloss high adhesion	Exhibits excellent adhesion on non-absorbent substrates such as plastics and metallized paper/board.	60UC2220	+++	х	65 +/-5*	++	+++
NewV lac gloss Cast&Cure	For excellent performance in Cast&Cure applications. (for holographic images)	60UC9222	+++	X ²⁾	60 +/-5	++	++
NewV lac gloss, high resistant	Developed to offer excellent alkali, oil and acid resistance for labels with very good gloss levels.	60UC9230	+++	X ²⁾	75 +/-5	++	++
NewV lac gloss high release	Very low odour varnish, with very good release properties.	60UC9251	++	х	45 +/-5	++	+++

+ = Low +++ = High

¹⁾ Viscosity is measured with DIN 4mm cup at 20°C. (*FORD 5mm cup)

²⁾ Preliminary tests are recommended.

³⁾ For water based primers please see our ACRYLAC product family.

Substrates

- Coated papers and cardboards
- Metalized substrates
- Plastic substrates eg. PE, PP, BOPP

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 Anilox EPDM or nitrile Lines/cm Cell volume

80 - 180 6 - 16 cm³/m²* 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. That results in the well-known "orange peel effect", or in poor adhesion to the ink layer.

Primer is needed in case of applying UV varnish on conventional ink layer.

For further application information please read our technical information sheet 50.G.001 UV curing inks and varnishes for offset printing - Directions for use and for varnishes on conventional prints the TI 50.G.003 UV coating of conventional offset prints.

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. More information on the subject of packaging for food, cosmetics, pharmaceutical products and tobacco can be found in the information sheet *50.G.002 NewV* for food packaging and 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

6 months from the delivery date if the container is not opened. 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

Contact addresses for advice and further information can be found under www.hubergroup.com This Technical information sheet reflects the current state of our knowledge. It is designed to inform and advise. We assume no liability for correctness. Modifications may be made in the interest of technical improvement.