

Special UV Varnishes & Inks



Johann Bauer
Applications Department,
Training

Finishing prints with a matt-glossy or a glossy-matt contrast; or applying a fluorescent ink to achieve a brilliant appearance; or literally “highlight” a print with a haptic relief or texture effect?

Apply a protective layer or an anti-slip layer on a floor? Make a matt glass or matt foil transparent? Point a safe way out of a dark room?

You can easily achieve all this using UV-curing varnishes and inks.

In the following overview you will find information about our present range of special UV-varnishes and inks.



Serigraphy by
Rainer Michely,
Nuremberg

www.artistproof.de

FINISHING VARNISHES for Full and Partial Finishing

Our range of varnishes for finishing of printed offset (mostly) sheets. Our UV 70/LC range has been formulated especially for processing on quick cylinder presses or flatbed equipment. UV 70/L-HV, UV 70/821 and UVN 70/122 are primarily used for achieving particular effects, even on difficult substrates.



UV 70/LC	High gloss varnish	Fabric suitable for processing (threads/cm)
<ul style="list-style-type: none"> For (one-sided) finishing of screen and offset prints. Highly reactive, very low viscosity preferably used on quick cylinder presses. Substrates: paper, cardboard. 		150 to 165
UV 70/LC-HV	High gloss varnish, adjustment of UV 70/LC with medium viscosity	150 to 165
<ul style="list-style-type: none"> Preferably used on flatbed equipment. 		
UV 70/LC-MT	Matt Varnish	150
<ul style="list-style-type: none"> Low viscosity, for matt finishing (also double-sided) of screen and offset prints. Substrates: paper, cardboard, PS, PVC. 		
UV 70/L-HV	Gloss Varnish for (absorbent) uncoated paper and cardboard	77 to 100
<ul style="list-style-type: none"> High viscosity, highly reactive, for one-sided prints. Substrates: paper, cardboard. 		
UV 70/821	Gloss Varnish, especially for highly absorbent paper and cardboard	43 to 150
<ul style="list-style-type: none"> High viscosity, for one-sided prints on highly absorbent paper and cardboard. 		
UVN 70/122	Glossy, texture effect, mostly used for partial finishing	120 to 150
<ul style="list-style-type: none"> High viscosity, high thixotropy, highly transparent, medium texture. Substrates: paper, cardboard, PVC. 		

TECHNICAL COATINGS

Varnishes with various specific properties, such as floor graphics, anti-slip effects, window clear. Different processing criteria.



Floor Graphics (anti-slip) and texture effects

MLS 70	Range of floor graphic varnishes	Fabric suitable for processing (threads/cm)
	<p>Product range for production of printed anti-slip surfaces (e.g., floor graphics). Also used for finishing of graphic prints as decorative structure effects. To obtain these specific properties the formulations contain special texture agents with particle sizes from 40 to approx. 200µ. Depending on the type of floor graphic varnish fabrics ranging from 24 – 100 threads/cm are used.</p> <ul style="list-style-type: none"> • Anti-slip properties have been tested according to DIN 51130:2014-02, ASR A1.5 and GUV-R 181. • Substrates: paper, cardboard, PS, PVC. 	
MLS 70/00	Fine structure	100-40
MLS 70/02	Coarse structure	24-140
MLS 70/02	Medium Structure	43-80
UV 70/488-NEU	Window Clear	100 to 120
	<ul style="list-style-type: none"> • For printing on structured foils (e.g., membrane switches, front panels). • High gloss, clear, medium viscosity, medium flexibility. Good mechanical and chemical resistances. • Substrates: PVC, PC, primer-coated polyester foils. 	
UV 70/623		100 to 120
UV 70/635-MT	Structure Varnishes	
	<ul style="list-style-type: none"> • For matting of glossy, transparent plastic surfaces, e.g., partial coating of membrane switches. • Matt structure, highly viscose, rigid. Results in a surface texture like a fine-grained sand-paper. Good mechanical and chemical resistances. 	
UV 70/623	Surface with a rough structure	100 to 120
UV 70/635-MT	Surface with a fine structure	

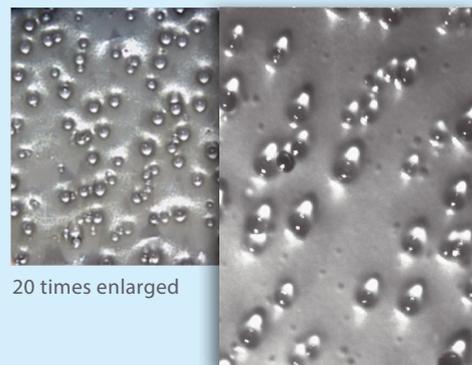
FINE
Anti-slip varnish
MLS 70/01



20 times enlarged

50 times enlarged

COARSE
Anti-slip varnish
MLS 70/02



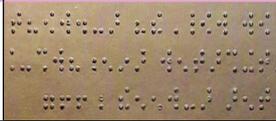
20 times enlarged

50 times enlarged

HAPTIC EFFECTS

Varnishes with a medium to high viscosity, adjusted for processing with coarse fabrics.
In combination with high built stencils (EOM) also suitable for printing of tactile relief structures.



UV 70/511	Relief varnish, high gloss	Fabric suitable for processing (threads/cm)
<ul style="list-style-type: none"> High viscosity. Good flexibility. Printing (one-sided) of high relief structures (up to 200µ) and partial finishing. Substrates: paper, cardboard, PVC, PC 		32 to 150
UV 70/597	Adjustment of UV 70/511 with medium viscosity	Special rotary screens
<ul style="list-style-type: none"> Especially for processing with rotary screens (Stork, Gallus, etc.) for roll labels. 		
UV 70/683	“Water Drop“ effect varnish	32 to 64
<ul style="list-style-type: none"> Medium viscosity. For prints (one-sided) of glossy, clear, highly transparent dot-forms and linear relief structures up to approximately 100µ. Substrates: paper, cardboard, PVC. 		
UVX2 70/841-BL	“Braille“ effect varnish	32 to 77
<ul style="list-style-type: none"> High viscosity, thixotropic adjustment, for printing (one-sided) of high dot-forms and linear structures (up to 400µ) resulting in highly tactile effects. Substrates: paper, cardboard, PVC. 		
80UV 70/825-THIX	Varnish for tactile warning signs on containers	32 to 43
<ul style="list-style-type: none"> Medium viscosity, thixotropic adjustment, for printing (one-sided) of tactile warning signs. Substrates: HDPE (pre-treated) containers. 		
VTGL 70/00	High gloss relief varnish, for glass containers	32 to 43
<ul style="list-style-type: none"> Medium viscosity, thixotropic adjustment, for printing of relief decorations on bottles, drinking glasses etc. Substrates: glass containers. 		

BRONZE COLOURS Ready-to use UV Bronze Colours with a stable shelf life

The conventional bronze pigments we use for our bronze colour ranges B, AB and MG are hardly or not at all suited for UV-curing systems. B bronzes, e.g., those used for mixing of bronze colours by customers often only have a pot life of about 6-8 hours as they react with the UV-binders.

Ready-to-use bronze colours with a stable shelf life require special pigments and above all a formulation adjusted to the individual UV ink system.

We offer ready-to-print standard bronze colours with a stable shelf life in some of our UV ink ranges. These are listed below. Fabrics suitable for processing range from 120-34 to 150-31 threads/cm.

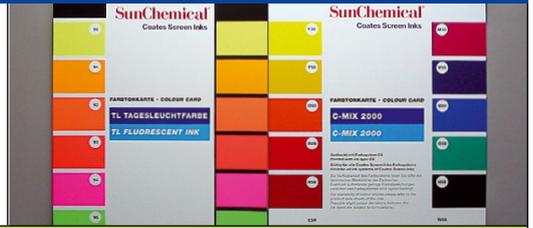


Ink Range	Silver	Rich Gold	Pale Gold
UVN	UVN 79/96	UVN 75/22	UVN 76/35
UVU	UVU 79/291	UVU 75/32	UVU 76/67
UVX2	UVX2 79/201	UVX2 75/25	—
UV-650018	UV79/134-650018	—	UV 76/43-650018
80UV	80UV 79/325	—	—
VTGL	VTGL-38004: PMS 877	VTGL-38003: PMS 871	—

More adjustments of bronze colours upon request

FLUORESCENT COLOURS

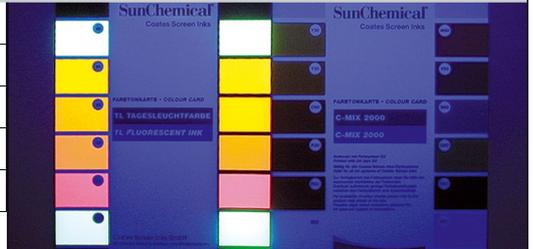
Fluorescent colours contain pigments which are triggered to "glow" by the invisible part of UV in the daylight. This part of UV light is transformed into visible light and increases the "light yield". We offer fluorescent colours with a very high colour intensity in our UV-ink range UVN.



Coates Screen "90 Colour Range"

Fabric suitable for processing (threads/cm) 120-34

UVN-Fluorescent Colour	Colour
UVN 90	Yellow
UVN 91	(Yellowish) Orange
UVN 92	Orange
UVN 93	Red
UVN 94	Pink
UVN 95	Green



In addition to our own fluorescent colours with a high colour intensity we also offer special colour shades according to Pantone PMS C Neon in ink type UVN.

Flourescent colours according to "PMS C Neon"

Fabric suitable for processing (threads/cm) 120-34

PMS C	UVN-Special Colour	Colour	PMS C	UVN-Special Colour	Colour
PMS 801 C	UVN 99/01	Neon Blue	PMS 808 C	UVN 95/22	Neon Blue Green
PMS 802 C	UVN 95/16	Neon Green	PMS 809 C	UVN 90/15	Neon Citric Yellow
PMS 803 C	UVN 90/14	Neon Yellow	PMS 810 C	UVN 91/14	Neon Light Yellow
PMS 804 C	UVN 91/13	Neon Orange	PMS 811 C	UVN 92/08	Neon Light Orange
PMS 805 C	UVN 92/06	Neon Orange Red	PMS 812 C	UVN 94/15	Neon Light Pink
PMS 806 C	UVN 94/13	Neon Pink	PMS 813 C	UVN 94/17	Neon Light Magenta
PMS 807 C	UVN 94/16	Neon Magenta	PMS 814 C	UVN 94/18	Neon Violet

PHOSPHORESCENT COLOURS

Coates Screen "96 Range of Phosphorescent Colours"

To achieve phosphorescent prints special pigments are required. These pigments retain the light energy and emit that energy in the dark as luminescence.

We offer two phosphorescent colour adjustments in our **UVN** ink range. As phosphorescent pigments are transparent, phosphorescent UV inks can be printed and cured using very course fabrics.

Basically, these adjustments can be processed using fabrics of 43 to 120 threads/cm. As the duration of the luminescence mainly depends on the thickness of the printed ink layer, generally very coarse fabrics are used.



UVN 96/39

Highly pigmented, yellow-greenish phosphorescent ink. Very long phosphorescent effect. Prints with long-term phosphorescence according to DIN 67510 are possible.

UVN 96/46

Highly pigmented, yellow-greenish phosphorescent ink. Only short-term phosphorescent effect. Suitable for applications such as advertising.

Coates Screen Inks GmbH Screen- and Pad Printing Inks

Wiederholdplatz 1 · D-90451 Nuremberg
Tel +49 911 64 22-0
Fax +49 911 64 22 200
info.coates@sunchemical.com
www.coates.de