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Laboratory: UV Inks Systems

ANTI-SLIP UV-VARNISHES

UV VARNISHES FOR FLOOR GRAPHICS AND OTHER TACTILE EFFECTS



RIGID PVC 300µ

50-FOLD
SCALE
20-FOLD



● **MLS 70/00** **UV-ANTISLIP VARNISH** **FINE**

fine coarse surface structure
recommended fabric: 100-40 to 90-48



● **MLS 70/02** **UV-ANTISLIP VARNISH** **COARSE**

coarse surface structure
recommended fabric: 27-140 to 24-140

Readers of our Screen News will surely remember former articles about anti-slip varnish systems. Two anti-slip varnishes for floor graphics were introduced in the 2003 edition Screen News.

The UV technology is just right for this application. Due to the size of the structure agents in the varnishes use of coarse fabrics is essential to prevent clogging of the screen mesh. Using UV-technology there won't be any problem curing thick layers of UV non-pigmented varnish systems. If such systems were formulated with solvent-based varnishes drying times would be extremely long.

The round-grained structure agents contained in the varnish system will result in a surface structure with an anti-slip effect. Thus these anti-slip varnishes are suitable for the production of walk-on floor graphics. However, very rough surfaces can be achieved using these varnishes. A road surface with an offset

pre-print for instance will not show a really rough surface until overprinted with a coarse anti-slip varnish.

Coates Screen Inks GmbH is constantly working to improve existing products. Due to close customer relationships we can exchange experiences and recognize improvement potential of existing products. For instance there were sometimes problems with brittleness of rigid PVC printed with UV 70/577. As with other UV inks impact-proof rigid PVC will become brittle like glass.

Therefore the anti-slip varnishes were improved, re-formulated in the flexible binder base Multistar MLS and supplemented with a third adjustment. Coates Screen Inks GmbH is now offering the



We had the anti-slip effect of prints tested at the Bavarian LGA (Industrial Control Authority) according to DIN 51130.

Products were classified as suitable and correspond to the anti-slip groups R9-R11.

MLS 70/00: R9 - R10

MLS 70/02: R11

MLS 70/03: R10-R11

*Approved according to DIN 51130 by the Federal Control Authority



● **MLS 70/03
UV-ANTISLIP VARNISH
MEDIUM**

medium coarse surface structure
recommended fabric: 54-64 to 43-80

following non-pigmented, low-odour clear UV anti-slip varnish systems:

● **FINE > MLS 70/00**

● **COARSE > MLS 70/02**

● **MEDIUM > MLS 70/03**

All three adjustments show very good adhesion on cardboard, rigid and plasticized PVC and polystyrene. However, you should not use finer fabrics than those recommended, as otherwise the structure agents will clog up the screen. Depending on the fabric used the varnishes require a curing energy between 250 mJ/cm² and 400 mJ/cm².

Naturally we can send you copies of these certificates upon request. The same applies to sample prints of all three adjustments applied on one sheet, so you can get an impression of surface structure and optical effects.

**UV ANTI-SLIP VARNISH WITH
A RUBBER-LIKE SURFACE**

Clear UV varnish UV 70/516 is another product showing this anti-slip effect. Formulated with special raw materials prints made with UV 70/516 show a rubber-like surface and therefore the anti-slip effect.

UV 70/516 is suitable for reverse side printing of mouse pads, desk mats, office chair mats and many other applications. This rubber-like surface can also be used as tactile effect for offset print finishing. If an offset printed car tire is overprinted with UV 70/516 there will be a tactile effect, which you can feel when touching the tire. Such an effect will address several senses due to its combination of optical and tactile effects. A very special promotional effect you will remember easily.

UV 70/516 shows good adhesion on many substrates such as paper, cardboard, plasticized and rigid PVC, polystyrene and polycarbonate. This anti-slip varnish should be printed with 54-64 to 77-55 fabrics and cured with an energy of 250-350 mJ/cm².

We will be pleased to send you sample prints of UV 70/516 upon request.



● **UV 70/516**

Recommended fabric: 54-64 to 77-55



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