

Water thinnable two component protection varnish with non slip properties

Series 482-5700/AR (Non Slip Lacquer)

easyPROTECT (2-Component for roll application)

Water based protection lacquer with non slip properties for (Inkjet) prints on film for floor graphics (Certified by LGA – authorised Institute for Material Testing and Certification in Germany).

Substrate

Recommended are typical substrates for floor graphics like PVC. Due to the meanwhile very wide range of available plastic films, their various modifications, the common incorporation of co-polymers and recycling components, a pre-test to confirm the suitability of the varnish in terms of adhesion, film performance and non slip properties is strongly recommended.

Application

Area of application for the non slip lacquer is mainly material used for floor graphics indoor and outdoor. The new non slip lacquer is a modification of the reliable standard two component protection lacquer series 482-5700. The lacquer should be mixed well before use because the anti slip additive could be settle in the lacquer.

The inkjet prints should not contain any residual solvents in order to achieve an optimised wetting and adhesion. The lacquer is not suitable for prints with oil based inks!

Properties and Handling

The hardener (1 part) must be well stirred in the EASYPROTECT varnish (10 parts) until a homogenous mixture is achieved. After 15 minutes of settling the varnish is ready to use. Initially visible foam has disappeared and the rheology has stabilised. The viscosity should be 40-60 seconds measured with a 4 mm DIN cup. To certainly avoid particle contamination it is recommended to filter the varnish prior to use through a suitable mesh.

The varnish must be applied with a wet film thickness of at least 100 microns in order to achieve a maximum non slip effect. This equals around 30-35 g/m² on the dried film. If applied

using a roll the following technique is recommended:

- Soak the roll completely with water and press out firmly.
- Fill the roll on the substrate with varnish and distribute evenly (wetting phase)
- Immediately add more varnish and carefully distribute a homogenous second layer. Keep the pressure of the roll low to deposit a heavy film weight (film build up phase).
- The initial uneven appearance of the wet varnish (air bubbles, orange peel) disappears soon during the film formation (auto levelling phase).

The described sequence must be carried out as quickly as possible. Unnecessary and repeated roll over and crosswise movement of the roll must be avoided, in particular when the varnish starts to dry, as this would interfere with the auto levelling function which develops a smooth and high gloss surface.

The EASYPROTECT protection lacquer can be applied without thinning.

The roll should apply 100 micron thickness.

If applied using a air brush the varnish should be reduced by 5% water. This should be stirred in slowly.

Independent from the selected method of application the varnish must be used within the valid pot life of 5-6 hours after adding the hardener. When the pot life has exceeded the viscosity will increase, the mixture becomes unusable and must be disposed off according to local regulations.

Drying

If laid out at room temperature (20-25°C) with a free air flow the EASYPROTECT non slip lacquer series 482-5700/AR will become touch dry after 3 hours. In order to obtain full drying and hardening the varnish must be stored for 48 hours in an ambient climate. The speed of the drying process can be substantially increased using a hot air drying tunnel set at 50°C. However, the final resistance performance will always be achieved after 5-7 days.

Cleaning

Rolls and other tools can be cleaned with water immediately after use. Dried varnish can only be removed using slightly alkaline water (ammonia solution) or a special cleaning liquid.

Storage stability

Under normal conditions (low temperature cycles, average temperature between 15-25°C) the varnish can be stored without loss of the designed properties for at least a year and the hardener for 6 months after manufacturing. Containers must be always firmly closed when not in use. The lacquer should be mixed well before use because the anti slip additive could be settle in the lacquer.

Non slip properties

The non slip properties of the lacquer series 482-5700/AR applied on floor graphics film has been tested and certified by the authorised Institute for material testing and certification in Germany. The institute has rated the lacquer with non slip property class R10. The test has been done according to DIN 51130 "examination of floor surfaces, determination of non slip characteristics; working rooms and areas with increased slip danger; walking on dangers; inclined plane."

Precautionary measures

Read material safety data sheet prior to processing. The material safety data sheets according to OSHA form contain indication of hazardous ingredients, TLV-level and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to processing as described in this technical leaflet. The statements in our leaflets have been made to the best of our knowledge and are given without any obligation. They serve to advise our business associates, **but it is absolutely necessary** to make your own printing tests under local conditions, with regard to the intended purpose prior to starting the printing job. In case of any doubts please contact our technical advisors. The application, use and processing of the products delivered by us are beyond our control. This is subject to your responsibility and there is no liability or guarantee on our part.

In case of justified complaints the manufacturer can only be made liable for the countervalue of the used ink system.

Addition of not mentioned products or competitors products are on your own risk and releases Printcolor Screen Ltd. of any later demands, especially in cases of damage and loss caused by alien products.

All former leaflets are no longer valid.

04.06 / RG