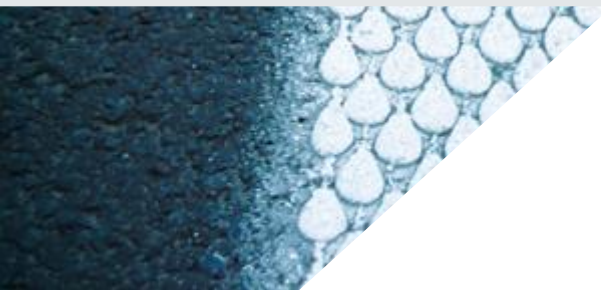
SWARCO LIMBURGER LACKFABRIK GmbH

Road Marking Systems

2-Component UV-Clear Varnish

TECHNICAL INFORMATION



SWARCO I First in Traffic Solutions.

2-Component UV-Clear Varnish

Art.-No.: 8616

Special application – Surface sealing

Version: 2014-09-11

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1 Main characteristics / Fields of application

2-Component UV-Clear varnish…

- is a solvent-containing, aromatic-free 2-component – clear varnish on the basis of acrylic polyols combined with an aliphatic polyisocyanate
- is distinguished by its chemical reaction resulting in extended durability, resistance against chemicals and abrasion. Chemical reaction takes place besides physical drying through evaporation of solvent
- the transparent clear varnish surface is applied on top of car park markings and other indoor markings
- reduces the attraction of dirt on markings exposed to heavy traffic impact and increases abrasion resistance (e.g.: for H145 or 2-comp. indoor paints)
- extends useful life for non-UV-stable markings due to its enhanced UV-protection properties (e.g.: for afterglow and fluorescent paints)
- suitable for airless and airspray technique. Of limited use for manual application with roller or brush

2 Technical Data

Color	transparent
Density	approx. 1.01 kg/l +/- 0.1
Potlife	approx. 1.5 h, depending on weather conditions (temperature, humidity, wind), surface temperature and applied film build.
Solid content	min. 50%
Mixing ratio	Base component (2-comp. UV-Clear varnish) : hardener (8620) = 2 : 1
Curing time	min. 8 h (or overnight) That are laboratory values that may differ from field conditions depending on climate (temperature, humidity, wind), material, layer thickness and surface. In general the marking's trafficability must be checked before exposing it to traffic impact.
Thinner	When needed add 2 - 5% Thinner for 2-C Acrylic (Art. No.: 8630) for optimizing spray properties.
Thinner for cleaning	For cleaning of machine and tools use Special cleaner for marking machines (Art. No.: 3086) or Thinner for 2-comp. Acrylic (Art. No.: 8630)
Storage stability	6 months in unmixed, sealed original packaging and sheltered from frost and direct sun exposure
Standard packaging	**2-comp UV-Clear varnish:** tin foil cans with 1/5/10 l **Hardener 8620:** cans with 0,5/2,5/5 l (corresponds with mixture ratio)
Indentification	The regulations and instructions concerning appropriate transport, handling, storage, first aid measures, toxicology and ecology are stated in our material safety data sheets! The instructions stated on the product label and in the MSDS must be followed.
Processing temperature	min. + 5°C
Surface temperature	+ 5°C to + 45°C
Relative humidity	max. 75 % (dew point spreadsheet has to be regarded)
Layer thicknesses	max. 100 µm
Theoretical consumption	approx. 0.10 kg/m²; the actual consumption depends on the applied layer thickness and the type and state of the surface

3 Surfaces / pretreatment

The marking surface must be dry, clean, free from grease, oil and loose gravel and other contaminations. Existing old markings must be checked for their carrying capacity and compatibility with the material to be applied. Our marking products are approved in combination with 2-component UV clear varnish. It is recommended to spray the 2-component UV clear varnish as soon as the marking is cured and solvents have evaporated (coldplastic, 2-comp. marking paints) in order to avoid curing failures.

4 Application techniques / processing instructions

Before processing 2-component UV clear varnish must be homogenously stirred in its original container. Then the hardener (8620) must be added und stirred uniformly into the base component at the stated mixing ratio (2:1). The exact machine adjustments depend on application conditions, type of machine (airless or airspray), spray nozzle, max. 100µm specification and must be made according to the machine manufacturer's instructions. Prior to marking interruptions remove the clear varnish mixed with hardener from the machine (regarding the very short potlife and fast curing properties).

The cleaning needs to be done before applying 2-component UV-clear varnish with Thinner for 2-component Acrylic (Art.-No.: 8630) or Special cleaner for marking machines (Art.-No.: 3086) exclusively. Avoid any blending with other marking materials or thinners. It is recommended to use/remove remaining clear varnish first before refilling newly mixed clear varnish. Cleaning of machine (paint tank and hoses) and tools must take place in time before the fast curing occurs. It is important to apply the max. of 0.1 mm layer thickness evenly, and to avoid higher layer thickness otherwise curing time will be prolonged. It is recommended to apply test markings to control all parameters particularly the limited layer thickness.

Manual application might cause higher thickness and / or cause the formation of bubbles. After application allow for enough curing time, since the chemical reaction needs to complete. Otherwise traffic impact may cause soiling.