SL-PU UV NF

Description

SL-PU UV NF is an aliphatic two component, solvent-free, pigmented, UV stable and self-levelling polyurethane resin.
A SL-PU UV NF floor is applied where a flexible, elastic, comfortable and seamless floor is required.
Ideal for esthetic applications in homes and light commercial areas.

For many years, this self-levelling floor has been used together with our Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss. These renowned combinations are scoring top points not only on abrasion resistance and hardness but also for its stable aliphatic UV topcoat.
Use 3% to 5% Quarzline ''antislip kfu'' to achieve the perfect non-slip finish.

This flooring system is extremely suitable to be broadcasted with decorative coloured flakes.

Properties

Highly elastic with good surface hardness	
Aliphatic	
Liquid proof	
Solvent-free	
Good chemical and mechanical resistance.	
Viscosity [1] (mPa.s)	4000 – 4500
Shore Hardness [2]	> D35
Potlife @ 20ºC (min)	~ 20
Electrical Conductivity	insulating
Density [3] (g/cm$^{3)}$	1,42
Adhesive strength [4] (N/mm$^{2)}$	> 1.5 (Concrete fracture)

[1] = Brookfield, LV4, 30 RPM, @ 23ºC
[2] = DIN 53505, 28 days/+ 23ºC/50% R.H
[3] = ISO 2811-1, + 23ºC/50% R.H
[4] = EN 4624, 14 days/+ 23 ºC/50% R.H

Form

Component A: Liquid, coloured
Component B : Liquid, clear transparent

Almost all RAL, NCS AND SIKKENS colours are available. Other colours available on request

The SL-PU UV NF must always be finished with a Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss.

Application at different stages and combining different batch numbers in one project could result in slight colour differences, to avoid this:

Order all materials for your project at the same time

Packaging

Component A: 20,5 kg bucket
Component B: 4,5 kg jerrycan
Component A+B: 25 kg set

Shelf life/storage

Up to 12 months after the production date if kept in the original, sealed, unopened and undamaged packaging and stored dry between +5 ºC and +30 ºC.

Mixing

Mixing ratio: Component A: Component B = 80: 20 (parts by weight)

Add the complete contents of component B to component A and mix for 2 minutes into a homogeneous mixture.

Then pour the mixture into a clean bucket and mix again for 1 minute. This will prevent unmixed parts on the edge and/or bottom of the bucket.

To minimize air inclusions do not mix too quickly.
Air that has not been mixed in, doesn't have to come out during curing.

Mixing is preferably done with a powerful mixer such as the Quartzline WK 90 mixer on a low speed (300 – 400 RPM).

System construction

Primer for porous substrates:
On porous surfaces use Quartzline "Primer BHH" which will penetrate the substrate and ensure a strong mechanical bond.

Primer for non-porous substrates:
Quartzline Primer GW is used on non-absorbent substrates. This primer has very good physical adhesion, especially for ceramic tiles.

Scratch coat: For extra levelling and/or to seal the substrate, an additional scratch coat of Quartzline "Primer BHH" with Microdol A100 filler could be an option.
A scratch coat is preferably applied at 0,5 to 1 kg per square metre

Wearing Coarse: ***SL-PU UV NF***

Topcoat: The SL-PU UV NF must be covered with an aliphatic topcoat such as the Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss.

Extra topcoat: To increase wear resistance and UV protection, a second layer of Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss can be applied.

NOTE: Coating PU MG CANNOT be used on the SL-PU UV NF !

FOR ALL SELF-LEVELING SYSTEMS THE FOLLOWING APPLIES:
After applying the primer and optional scratch coat, the surface must be sealed BEFORE the self-leveling layer is applied. This is done to avoid blisters and holes in the finishing coat

The Quartzline SL-PU UV NF is part of the following systems:

Deco-Line UV

Deco-Line UV Ultra

Consumption

Screed floor system	Product	Consumption
Primer	Primer BHH Primer GW	125 - 250 g/m² 100 - 150 g/m².
Scratch Coat (optional)	Primer BHH + Filler A100	500 - 1000 g/m²
Wearing Course **1 mm layer thickness** **2 mm layer thickness** **3 mm layer thickness**	**SL-PU UV**	**~ 1420 g/m²** **~ 2840 g/m²** **~ 4260 g/m²**
Topcoat	Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss.	See relevant TDS
Extra Topcoat (optional)	Quartzline Coating PU SG NF matt or Coating PU SG NF Satin Gloss.	See relevant TDS

Substrate preparation

The substrate must be sound and sufficiently compression-resistant (at least 25 N/mm²), with a minimum adhesive strength of 1,5 N/mm².

The substrate must be clean and dry and free of dirt, oil, grease and other soiling.

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete and loose cementitious levelling must be removed and surface damage such as blowholes and voids must be repaired with Quartzline Epoxygel and then primed again.

All dust, loose and friable material must be fully removed from all surfaces before the product is applied, preferably using a brush and/or industrial vacuum cleaner.

The concrete or screed substrate must be primed.
Uneven substrates must be levelled to achieve an even substrate. Use Quartzline Cementitious SL Underlayment or Cementitious SL Constructive.
Please see respective Technical Data Sheets for more information.

If the surface is older than 48 hours, always perform a preliminary adhesion test.

Application conditions

Surface temperature:	Minimum 10ºC, maximum +25 ºC
Ambient temperature:	Minimum 10ºC, maximum +25 ºC
Surface moisture content:	< 4 % moisture To be tested with a carbide measurement.
Relative air humidity:	Maximum 70% R.H.
Dew point:	Beware of condensation!

The temperature of the subfloor and non-hardened material must be at least 3ºC higher than the dew point to prevent the risk of condensation formation, efflorescence or mold formation on the floor finish.

Application

Processing time @ 20 ºC	20 minutes
Touch dry @ 20 ºC	4.5 hours
Can be walked on @ 20 ºC	12 hours

Check the moisture content of the surface, the R.H. and dew point before applying.

Pour SL-PU UV NF and spread evenly with a flat or toothed trowel.
Preferably pour the complete contents of the bucket in 1 go to avoid a fast reaction of material left in the bucket.

Remarks

Do not use SL-PU UV NF on surfaces with rising damp.

After application Quartzline SL-PU UV NF must be protected from damp, condensation and water for at least 24 hours (+20 °C).

No Non-hardened material reacts with water (foaming), so while working, prevent drops of sweat falling into the material by using a Quartzline headband and wristband!

Uneven or dirt covered substrates should not be treated with thin coatings. Both substrate and adjacent areas should always be thoroughly prepared and cleaned prior to application.

The incorrect assessment and treatment of cracks may lead to a reduced service life and recurrent cracking.

Immediately process all mixed material, otherwise at the end of the processing time the flow and de-aeration will decrease.

Use material with the same batch numbers to be sure of an exact and even color match.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters as they produce large quantities of both CO^2 and water vapour which may adversely affect the finish.
Only use electrically powered warm air blower systems when heating is needed.
Switch off underfloor heating during application and for the first 48 hours, after this period you may increase the temperature gradually.

Underfloor heating or high ambient temperatures, combined with a highly concentrated load, can, in certain circumstances, result in imprints in the resin.

Cleaning/maintenance

To maintain the appearance of the floor after application, the floor system must be kept clean and all spillages removed immediately.
The floor must be cleaned regularly using a rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc.
Always use suitable detergents and waxes.

Clean the floor with tepid water. Never use hot water (warmer than 40 °C).

Value base

All technical data stated in this technical data sheet is based on laboratory tests.
Actual measured data may vary due to circumstances beyond our control.

Health and safety information

For information and advice on how to safely handle, store and dispose of chemical products, users should refer to the most recent material safety data sheet containing physical, ecological, toxicological and other safety related data.

Legal notes

This information, and in particular the recommendations related to the application and end use of Quartzline products, is provided in good faith based on our current knowledge and experience of the products. It is valid for products that are correctly stored, treated and applied under normal conditions in accordance with Quartzline's recommendations.

In practice, differences in materials, substrates and actual on-site conditions are such that no warranty in respect of merchantability or of suitability for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.
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