SL-PU D30

Quartzline SL-PU D30 is a two-component, self-levelling poured floor based on aromatic polyurethane with flexible-elastic properties, which discolours under the influence of UV radiation. Suitable in commercial environments such as offices, schools, hospitals, hospitality, shops and museums.

SL-PU D30 is suitable for various finishes, including a finish with decorative coloured flakes or creating a Mixed Colour poured floor. If no discolouration is desired, coat the floor with Quartzline Coating PU SG Coloured for a UV-resistant colour finish. For extra noise reduction, a damping layer can be applied under the poured layer.



*CE according to EN 13813 (DoP06PUD30015). Emissions tested by Eurofins (2018). * Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).*

FEATURES

- Flexible and elastic
- Pigmented
- Aromatic
- Liquid-tight
- Solvent-free
- Good chemical and mechanical resistance

TECHNICAL PROPERTIES

Property	Unit	Value
Viscosity[1]	mPa·s	1.750 – 2.250
Shore hardness[2]	–	> D30
Tensile strength @ 8 d[3]	N/mm²	~ 8
Elongation at break @ 8 d[3]	%	≥ 180
Tear strength @ 8 d[4]	N/mm²	~ 15
Tensile strength @ 28 d[3]	N/mm²	~ 10
Elongation at break @ 28 d[3]	%	≥ 160
Tear strength @ 28 d[4]	N/mm²	~ 25
Electrical conductivity	–	insulating
Density[5]	g/cm³	1,42
Adhesion strength[6]	N/mm²	> 1.5 (concrete failure)

[1] Brookfield, LV4, 30 RPM, @ 23 °C [2] DIN 53505, 14 days / +23 °C / 50% R.H [3] ISO 527 / +23 °C / 50% R.H [4] ISO34-1, +23 °C / 50% R.H [5] ISO 2811-1, +23 °C / 50% R.H [6] EN 4624, 14 days / +23 °C / 50% R.H

APPLICATION CONDITIONS

Substrate temperature	Minimum 10 °C, maximum 25 °C
Ambient temperature	Minimum 10 °C, maximum 25 °C
Substrate moisture content	< 4% moisture (test via calcium carbide measurement)
Relative humidity	< 70% R.H.
Dew point	Min. 3 °C above the dew point

The temperature of the substrate and of the uncured material must be at least 3 °C above the dew point to prevent condensation, white discolouration or foam formation.

SUPPLY FORM

Component	Consistency	Appearance
A	Liquid	Coloured
B	Liquid	Light brown

SET SIZES

Set size	Component A	Component B	Packaging
25 kg	20 kg	5 kg	Bucket + jerry can
12,5 kg	10 kg	2,50 kg	Bucket + jerry can
± 1 kg	0,8 kg	0,2 kg	Can + can

Mixing ratio A : B = 80 : 20 (parts by weight). Each set contains one component A and one component B.

STORAGE & SHELF LIFE

Shelf life	Up to 12 months from production date
Packaging	Original, sealed, unopened and undamaged
Storage conditions	Dry, between 5 °C and 30 °C

SURFACE PREPARATION

The substrate must be sound, clean, dry and flat, with a minimum compressive strength of 25 N/mm² and a minimum adhesion strength of 1.5 N/mm².

Mechanically treat concrete substrates, for example by low-dust blasting or diamond grinding, to remove the cement skin and create a rough, adhesive surface. Remove weak concrete and loose levelling layers. Fill major damage, holes and cavities with Quartzline Epoxygel or the appropriate Quartzline MRP.

Level uneven substrates with the appropriate Quartzline Cementitious or Alpha SL levelling mortar.

Then apply a primer. In most cases, Quartzline Primer BHH is used on porous substrates and Quartzline Primer GW on closed substrates. In specific situations, alternatives can be used: Quartzline Primer DPM for residual moisture up to 6%, Quartzline Europox Z speed for time-critical applications and Quartzline Primer PU BHH as a polyurethane alternative.

After priming, treat any cracks in the substrate with a filler made by thickening the primer or scratchcoat with SYLOTHIX 51.

Then apply a layer of Quartzline SL-EP or SL-PU scratchcoat. Before applying the self-levelling floor, always carry out an adhesion test if the scratchcoat is older than 48 hours or in case of doubt about adhesion.

Make sure the substrate is completely closed after the primer and the scratchcoat before the self-levelling floor is applied, to prevent bubbles and pinholes.

No primer or scratch coat is required for a damping underlay, and Silencio dB can be used. Alternatively: bond rubber mats to the substrate with Quartzline PU Adhesive, seal the mats with Quartzline PU Sealcoat and then apply a scrape coat of Quartzline SL-PU D30.

Switch off underfloor heating at least 48 hours before, during and after installation. For new-build floors with underfloor heating, follow a start-up and cool-down protocol.

Note: do not use polyester-based filler, as it is difficult to achieve adhesion on it.

CONSUMPTION

The consumption of SL-PU D30 is 1,450 g/m² per mm of layer thickness.

MIXING

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

Add component B completely to A and mix for at least 2 minutes with a Quartzline DLX 152 mixing paddle at 300–400 RPM until homogeneous. Pour the mixture into a clean bucket and scrape all residue from the wall and bottom. Then mix intensively for another 1 minute. Avoid mixing too quickly or too long to prevent air entrapment.

For a Mixed Colour poured floor, carry out the mixing process of both half sets separately, then combine them in a large bucket and mix lightly by hand with a stirring stick.

APPLICATION

Pour the SL-PU D30 onto the floor and spread it evenly with a flat trowel. Preferably apply the entire contents of the bucket at once, as the material reacts quickly when left in the bucket.

For a finish with decorative coloured flakes, first let the poured floor flow out completely, then walk on the still-wet floor with Quartzline 18 mm spiked shoes and broadcast the flakes evenly.

After curing, finish SL-PU D30 with 1–2 layers of Quartzline Coating PU SG NF Matt or Satin Gloss. Or with 1 layer of Quartzline Coating PU SG Coloured for a UV-resistant colour finish, optionally followed by a layer of Quartzline Coating PU SG NF Matt or Satin Gloss for extra protection.

CURING TIME

Pot life	20 min
Dust dry	4.5 hours
Walkable	12 hours

The times stated apply under normal conditions at 20 °C. Higher temperatures may shorten these times and lower temperatures may extend them.

REMARKS

- Treat cracks in the substrate carefully to prevent recurring crack formation.
- Maintain existing expansion joints and fit profiles where necessary.
- Check that the applied scratchcoat has fully closed the substrate; SL-PU D30 cannot be applied on open substrates.

- Do not apply SL-PU D30 on substrates with rising damp.
- For one project, order all materials in a single batch to avoid colour differences.
- Ensure a clean and smooth substrate. Embedded dirt remains visible after applying a thin poured layer.
- When heating is required, use only electrically powered hot-air blower systems.
- Protect freshly applied SL-PU D30 from moisture, condensation and water for at least 24 hours.

CLEANING / MAINTENANCE

For lasting preservation of the floor, contamination should be removed immediately. Clean the floor regularly with suitable cleaning agents and cleaning equipment. Use lukewarm water for this.

BASIS OF VALUES

All technical data in this product data sheet is based on laboratory tests. Data may change depending on the conditions.

HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, the user should consult the most recent safety data sheet (SDS), regarding the physical, ecological, toxicological and other safety-related data.

LEGAL NOTICE

The information and recommendations provided are based on Quartzline's current knowledge and experience when used correctly under normal conditions. Due to variations in materials, substrates and conditions, no warranty or liability can be accepted for suitability or application. Quartzline reserves the right to change product properties. Third-party proprietary rights must be respected. All deliveries are subject to the applicable terms and conditions of sale and delivery.