Coating PU MG Satin Gloss

Description

Coating PU MG Satin Gloss is a two part, water-based, transparent topcoat, based on high-grade non-yellowing polyurethane resins. The coating has a silk gloss finish and is characterized by a very high surface hardness. This coating has been on the Quartzline product range for a long time and is renowned for its excellent long lasting durability.

The coating has a very low VOC content and is easy to apply with a nice smooth finish without leaving application marks. It also exhibits a very good stain resistance.

Ideal for storage halls, logistic areas and workshops.

Use 3% to 5% Quarzline ''antislip KFU'' to achieve a antiskid finish.

Properties

Water-based	
Aliphatic, so UV stable	
Provided with UV absorbers, so slows the discoloration of underlying layers.	
Easy to clean	
Low VOC level in conformity with AgBB	
Viscosity [1] (mPa.s)	1200 - 1400
Density [2] (g/cm^3)	1.04
Potlife @ 20 ºC (min.)	~ 30
Solid Content (%)	Ca. 38
Abrasion resistance [3] (mg)	12
Adhesive strength [4] (n/mm$^{2)}$	> 1.5 (Concrete fracture)

[1] = Brookfield, LV3, 30 RPM, @ 23ºC
[2] = ISO 2811-1, + 23ºC/50% R.H
[3]= Taber Abrasion, CS10, 10N and 1000 cycles
[4] = EN 4624, 14 days/+ 23 ºC/50% R.H

The Coating PU MG Satin Gloss has outstanding cleaning properties, the extremely smooth surface means there are less places for dirt to collect making this coating incredibly easy to clean.
All high gloss coatings will eventually turn to silk-gloss due to everyday wear and tear.
Matt coatings do the opposite, intensive use causes a polishing effect and eventually the coating will turn to silk-gloss on areas that are used most.
So in the long run a silk-gloss coating is always easier to clean and retains its beauty longer than a matt or high-gloss coating.

Form

Component A: Liquid, milky
Component B : Liquid, clear

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

Order all materials for your project at the same time

Packaging

Component A: 4.17 kg jerrycan
Component B: 0.83 kg bottle
Component A+B: 5 kg set

Shelf life/storage

Up to 6 months from date of production if stored correctly in the original, unopened and undamaged sealed packaging and stored dry between +5 ºC and +30 ºC.

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Mixing

Mixing ratio: Component A: Component B = 83.4 : 16.6 (parts by weight)

While mixing add part B to part A and mix continuously for 3 minutes until a uniform mixture has been achieved. Mix on a high shear so the two components can emulsify.

Let it pre-react for 10 minutes. To ensure thorough mixing and to prevent unmixed parts on the edge and/or bottom pour the materials through a sieve into a clean second container and mixed again briefly.

If “Antislip KFU” is needed, it is added at this stage and mixed for another 30 seconds.

Always choose the correct mixing paddle and ensure that it is always fully submerged in the liquid. Use a Quartzline WK70 mixing paddle in combination with a five litre bucket when processing 1 set. For 2 sets combine the Quartzline WK70 mixing paddle with a 10 litre bucket and for 3 sets use the Quartzline WK90 mixing paddle in combination with a 20 litre bucket.

Always mix at the highest possible speed to achieve the best possible emulsification and create a swirling vortex in the coating. Under no circumstances must the coating be allowed to splash or absorb air, should this occur then reduce the mixing speed immediately.

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 should be used on non-absorbent substrates. This primer has very good physical adhesion, especially for ceramic tiles.

Scratch coat: An extra scratch coat combining Quartzline “Primer BHH” with Microdol A100 filler can be used when extra sealing and levelling of the substrate is needed. A scratch coat is preferably applied at 0,5 to 1 kg per square metre

Wearing course: The following Quartzline floor systems can be used:

- Quartzline SL-PU D60
- Quartzline SL-PU D70
- Quartzline SL-EP 2K
- Quartzline Coating EPG Coating
- Quartzline Stone Carpet
- Quartzline Mortar floor sealed with Quartzline Topcoat E

Topcoat: ***Coating PU MG Satin Gloss***

Extra topcoat: For extra wear resistance and extra UV protection, a second layer of Coating PU MG Satin Gloss is possible.

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.

Consumption

Coating System	Product	Consumption
Primer	Primer BHH Primer GW	125 - 250 g/m² 100 - 150 gr/m²
Scratch Coat (optional)	Primer BHH + Filler	500 - 1000 g/m²
Wearing course	See relevant TDS	
Topcoat (optional)	**Coating PU MG Satin Gloss**	**150 - 175 g/m²**

Applying quantities less than 150 g/m^2 can result in roller marks, gloss differences and irregularities in the surface.

Substrate preparation

The substrate must be sound and of sufficient compressive strength (minimum 25 N / mm²), with a minimum pull-off strength of 1,5 N/mm².

The surface must be clean, dry and free of all contaminants such as dirt, oil, grease, previous coatings and surface treatments.

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

Relative air humidity: Maximum 70% R.H.

During hardening, humidity must not exceed 70% of the maximum RH and care must be taken to ensure that sufficient ventilation and fresh air can remove the excess moisture. If the air is saturated, the film **CANNOT** dry.

Dew point: Beware of condensation!

The substrate and uncured floor must be at least 3ºC above dew point to reduce the risk of condensation or efflorescence on the floor finish.

Application

Processing time	40 minutes @ 10 ºC 30 minutes @ 20 ºC 20 minutes @ 30 ºC
Touch dry @ 20 ºC	2 hours
Foot traffic @ 20 ºC	24 hours
Light traffic @ 20 ºC	48 hours
Fully cured @ 20 ºC	7 days

Check the R.H. and dew point before application.

Pour a small quantity of mixed material into a bucket and work the edges with a brush and a 10 cm microfiber roller. Do not work too far ahead to avoid drying and therefore caking.

Depending on the size of the application area, use either a 25 cm or preferably a 50 cm wide microfiber roller to apply the coating. Pour out a puddle and spread it from there.

Apply the coating quickly and evenly. Always work wet on wet.

While applying, try to keep draughts to a minimum. Keep windows and doors closed to avoid accelerated drying.

As soon as the coating has been applied and evenly spread (correctly), start ventilating to avoid saturating the air with water vapour.
If there is no ventilation and the coating remains moist for too long, surface imperfections and insufficient coating film-formation may occur.

In spaces that are difficult to ventilate, for example bathrooms, extra ventilation must be introduced.

Make sure that no glossy patches are left behind, caused by absorption of the coating by the roller.

See www.quartzline.nl for the instruction video.

Work as quickly as possible and always within the pot life, which will depend on the temperature (20 min. at 30 °C - 40 min. at 10 °C).

Caution!: Approaching the end of pot life cannot be visually anticipated.

Remarks

After application Quartzline Coating PU MG Satin Gloss must be protected from damp, condensation and water for at least 7 days (+20 °C).

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.

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.

Coating PU MG cannot be used on the SL-PU UV or SL-PU D30.

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 the 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 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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