

PRODUCT DATA SHEET

Reference: TDS02BU1K026

BINDER 1K UV



Quartzline Binder 1k UV is a one-component, non-yellowing polyurethane binder used for decorative stone carpet and marble flooring systems. It is characterized by its excellent UV resistance, toughness and high gloss finish.

Due to the thixotropic nature of the binder, an optimal balance is achieved between substrate adhesion and bonding strength between the aggregates.

Ideal for applications such as terraces, balconies, pool surroundings, driveways, living rooms, offices, and galleries.

PROCESSING CONDITIONS:

Substrate temperature	Minimum 10°C, maximum 30°C
Ambient temperature	Minimum 10°C, maximum 30°C
Substrate moisture content	< 3% moisture (CM method)
Relative humidity	< 75% R.H.
Dew Point	Beware of condensation

The substrate temperature and uncured material temperature must be at least 3°C above the dew point to reduce the risk of condensation, foaming, or surface tackiness.

SUBSTRATE PREPARATION:

The substrate must be sound, clean and dry. Remove dirt, oil, grease, and other contaminants. Ensure minimum compressive strength of 25 N/mm², and a minimum pull-off strength of 1.5 N/mm².

Prepare concrete mechanically by dust-free blasting or scarifying to remove cement laitance and obtain a rough, clean, and strong bonding surface. Remove weak concrete and loose cement-based levelling compounds. Repair surface defects such as holes and voids using Quartzline Epoxygel. Do not use polyester-based fillers, as adhesion cannot be achieved.

Remove all dust and loose particles completely before application, preferably using a broom and/or industrial vacuum cleaner. Then primer the concrete or screed with Quartzline Primer GW or Quartzline Primer BHH

CONSUMPTION:

Use 3 kg Quartzline Binder 1k UV per 50 kg of quartz or marble.

Aggregate	Size	Approx. Consumption
Quartz	3-4 mm	~14 kg/m ²
Quartz	2-3 mm	~13 kg/m ²
Quartz	1-2 mm	~11 kg/m ²
Marble	1-4 mm	~14 kg/m ²
Marble	4-6 mm	~17 kg/m ²

PROPERTIES:

Solvent-free
UV-resistant
Suitable for outdoor applications
Easy to apply
Non-allergenic
Seamless

TECHNICAL PARAMETERS:

Density ¹ (g/cm ³)	1,16
Viscosity ² (mPa·s)	1.000-1.500
Shore hardness ³	> D80

1 = ISO 2811-1, + 23°C/50% R.H

2 = Brookfield, LV4, 30 RPM, @ 23°C

3 = DIN 53505, 14 days/ + 23°C / 50% R.H

INFORMATION:

Packaging: 3 kg Jerrycan

Appearance: Liquid, clear transparent

Shelf Life: Up to 6 months from date of production when stored in original, sealed, unopened, and undamaged packaging in dry conditions between 5°C and 30°C.

CURING TIME:

Phase	At 20 °C
Open time	30 min
Foot Traffic	24 hours
Fully mechanically loadable	2 days
Fully Cured	7 days



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APPLICATION:

Add the Binder 1k UV to the quartz or marble aggregate in a Quartzline mixing tub and mix using a powerful mixer fitted with a Quartzline WK200 mixing paddle. Avoid excessive concentrations of binder within the aggregate mixture, as this may cause foaming.

Check following conditions before application:

- the ambient temperature,
- relative humidity (R.H.)
- dew point.

Curing time is highly dependent on the ambient temperature.

Ambient Temp.	Approx. Curing Time
10 °C	9 hours
20 °C	4 hours
30 °C	2 hours

**The curing times are indicative and based on standard conditions.*

Evenly distribute the material over the substrate using a flooring trowel. A plant spray bottle filled with water may be used to reduce adhesion of the aggregate mixture to the trowel and to facilitate compaction. Use this water sparingly to prevent foaming.

Always use an aluminium or other metal termination profile for terminations or hatch coverings with quartz or marble systems. Plastic profiles may only be used to separate different colours within a floor area.

IMPORTANT REMARKS:

- Protect the product from rain and water during application.
- Avoid exposure to light rain until 1 hour after the curing time, and in the case of heavy rain, at least 3 hours after the curing time.
- Do not apply on substrates with rising damp.
- Protect freshly applied Binder 1k UV from moisture and condensation for at least 24 hours.
- Curing times are longer at low temperatures.
- Incorrect assessment and treatment of cracks may reduce service life and result in recurring cracking.
- The material must be applied immediately once mixed with aggregates. At the end of the working time, the material becomes highly viscous, loses its workability and cannot be properly applied.
- If heating is required, use electric-powered warm air ventilation systems only.

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 guarantee or liability can be accepted for suitability or application. Quartzline reserves the right to change product properties. Third-party property rights must be respected. All deliveries are subject to the applicable terms and conditions of sale and delivery.

VALUE BASE:

All technical data stated in this product information sheet are based on laboratory tests. Values may vary depending on site conditions and application circumstances.

HEALTH AND SAFETY:

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

CLEANING / MAINTENANCE:

To maintain the durability of the flooring system, spilled contaminants must be removed as soon as possible. Clean regularly using brushes, scrubber/dryer machines, rubber squeegees, or high-pressure cleaning equipment with suitable detergents. Clean the floor with lukewarm water. Never use hot water (above 40°C).