

Epoxy Gel

Description

Quartzline Epoxy Gel is a two part, solvent-free epoxy paste. When used as a primer for vertical epoxy mortar applications, it prevents the mortar from sagging. It can also be used as a primer under our Quartzline Coving mortar or as a putty to repair damaged substrates.

A truly wonderful and multifunctional Quartzline product !

Properties

Liquid proof	
Near solvent free	
Used for vertical applications	
Good chemical and mechanical resistance	
Electrical conductivity	>100 GΩ
Viscosity ¹ (mPa.s)	30000 - 32000
Density ² (g/cm ³)	1,08
Shore Hardness ³	>D80
Adhesive strength ⁴ (N/mm ²)	> 1.5 (Concrete fracture)

¹ = Brookfield, HBDV-I Prime, Spindle 72, 30 RPM @ 23°C

² = ISO 2811-1, + 23°C/50% R.H

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

⁴ = EN 4624, 14 days / + 23 °C / 50% R.H

Form

Component A: paste, white
Component B: Liquid, transparent, clear to slightly yellow.

Packaging

Component A: 10 kg. bucket
Component B: 4,2 kg bucket
Component A+B: 14,2 kg sets

Shelf life/storage

Up to 12 months from date of production if stored correctly in the original, unopened and undamaged sealed packaging, and stored dry between +5 °C and +30 °C.

Mixing

Mixing ratio: Component A: Component B = 70,42 : 29,58 (by weight)

Add part B to part A and mix continuously for 2 minutes until a uniform mixture has been achieved.

To ensure thorough mixing pour the materials into a second container and mix again for one minute to achieve an even consistency.

To minimize air bubbles avoid over mixing.

Mixing is preferably done with a power mixer on low speed, from 300 to 400 RPM, with Quartzline WK90 mixer paddle.

System construction

Primer for coverings: Quartzline Epoxygel

Coving material:

- Quartzline Mortar mixed with Quartzline Binder TP E27.
- Quartzline Coving Mortar

Coving material high anti sagging:

- Quartzline Mortar mixed with 10% Quartzline Epoxygel

Sealer: Quartzline Topcoat E

Topcoat: For extra wear resistance, UV protection and a matt or silk finish, Coating PU MG Matt or Satin Gloss can be used.

Consumption

Primer: Create a layer thick enough for the mortar to stick to.

Binder: For vertical applications higher than 10 cm or mortar thicker than 1 cm use 10% by weight Epoxygel onto the Quartzline mortar D.

All values are theoretical and depend on the substrate's evenness and porosity.

Substrate preparation

The substrate must be clean and dry and free of dirt, oil, grease and any other impurities or contaminants.

The substrate must be sound and sufficiently compression resistant (at least 25 N/mm²), with a minimum adhesive strength of 1.5 N/mm².

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. **DO NOT USE POLYESTER PUTTY** as no adhesion will be obtained.

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 corresponding Technical Data Sheet for more information.

Before applying the product, all dust and loose parts must be fully removed, preferably using a brush and/or industrial vacuum cleaner.

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

Application conditions

Substrate temperature:	Minimum 10°C, maximum +30 °C
Ambient temperature:	Minimum 10°C, maximum +30 °C
Relative air humidity:	Maximum 75% R.H.
Dew point:	Beware of condensation!

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

Application

Potlife @ 20°C	25 minutes
Touch-dry @ 20°C	12 hours
Foot Traffic @ 20°C	2 days
Fully hardened @ 20°C	7 days

Once the two parts have been mixed correctly, apply the Epoxygel using a brush. It is important to apply the gel very precisely under the tiles, corner strips and other stops so that delamination cannot occur.

Do not prime too far ahead as the Epoxygel must remain sticky. Apply the Quartzline Epoxygel in a thick layer so that the mortar can stick to the gel.

When priming is not correctly done the vertically applied mortar may sag.

When applying a layer that is thicker than 1 cm or higher than 10 cm, the mortar must be bonded with Quartzline Epoxygel instead of using Binder TP /Hardener E27.

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

Remarks

Protection from rain and water is necessary during processing and hardening.

Incorrect assessment and treatment of cracks can result in a reduction of lifespan and recurrent cracking.

Mixed materials must be processed immediately as workability will be reduced when pot life date expires.

If heating is required, do not use gas, oil, paraffin or other fossil fuel burners as they produce large quantities of CO₂ and water vapour, which can adversely affect the finish. For heating, only use electrically powered hot air ventilation systems.

Cleaning/maintenance

To maintain the appearance of the floor after application, the floor 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.

The user of the products must test the product's suitability for the intended application and purpose. Quartzline reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the technical data sheet for the product concerned, copies of which will be supplied on request.