

Resin TP Excellent UV

Description

Resin TP Excellent UV is a multifunctional two component epoxy resin that can be used as a transparent casting resin.
Resin TP Excellent UV can also be used as a binder for stone and marble carpets.
This product is characterized and renowned for its high transparency and excellent UV resistance with a high gloss and spotless finish.

Properties

Near Solvent free	
Low viscosity	
High bonding strength	
Alkylphenol free	
Easy application	
Electrical conductivity	>100 GΩ
Viscosity ¹ (mPa.s)	350 - 500
Density ² (g/cm ³)	1,10
Shore Hardness ³	>D80
Adhesive strength ⁴ (N/mm ²)	> 1.5 (Concrete fracture)

¹ = Brookfield, LV3, 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: Liquid, bright clear
Component B: Liquid, bright clear

Packaging

Component A: 5,75 kg bucket
Component B: 1,25 kg bottle
Component A+B: 5 kg sets

Shelf life/storage

Up to 6 months after production date if kept in the original, sealed, unopened and undamaged packaging and stored dry between +10 °C and +30 °C.

Application

Mixing ratio: Component A: Component B = 77: 23 (by weight)

Add part B to part A and mix slowly for two minutes until the mixture turns from a turbid to a completely clear liquid.

To ensure thorough mixing pour the materials into a clean second container and let it pre-react or 10 minutes. Then mix again slowly for 30 seconds.

When mixing the paddle must be fully submerged into the liquid.

To minimize air bubbles, avoid over mixing.

Mixing is preferably done with a power mixer on low speed, from 300 to 400 RPM, with a Quartzline WK 70 mixer paddle.

System construction

Primer for porous substrates:

On porous surfaces use Quartzline "Resin TP Excellent UV" for the casting layer. For other applications use regular Quartzline Primer BHH. These two primers will penetrate the substrate, fill the pores and ensure a strong mechanical bond.

Primer for non-porous substrates:

Quartzline Primer GW is used on non-absorbent substrates. This primer has excellent physical adhesion, especially for ceramic tiles.
Note that the Primer GW has a slight yellow appearance.

Wearing course:

The following Quartzline floor systems can be used:

- Resin TP Excellent UV cast layer
- Stone carpets bonded with Resin TP Excellent UV
- Marble carpets bonded with Resin TP Excellent UV

Topcoat:

For extra wear resistance, UV protection and a matt or silk finish, Coating PU MG Matt or Satin Gloss can be used.
For a High Gloss finish use the Coating PA Transparent

FOR EACH SELF-LEVELING SYSTEM THE FOLLOWING APPLIES:

After using the primer the substrate must be sealed BEFORE the cast layer is applied. This is to avoid blisters and holes in the wearing course.

Consumption

Use 150 - 175 g/m² for a primer layer on cement screed floors.
The consumption for the casting layer lies between 1 - 5 kg/m².
When used as a binder for stone or marble carpets use 8% binder by weight.

Substrate preparation

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

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.

If the epoxy surface is more than 48 hours old, always perform a preliminary adhesion test.

Application conditions

Substrate temperature: Minimum 15°C, maximum +30 °C

Ambient temperature: Minimum 20°C, maximum +30 °C

Relative air humidity: Maximum 60% R.H.

Dew point: Beware of condensation!

The temperature of the substrate and non-hardened material must be at least 3°C higher than the dew point to reduce the risk of condensation, efflorescence or stickiness (carbamate formation) on the floor finish.

Remark: Low temperatures and high air humidity increase the risk of efflorescence or carbamate formation.

Application

When using Quartzline Resin TP Excellent UV as a binder for stone or marble carpets please refer to the relevant Technical Data Sheets.

Casting application:

After the mixing procedure has been accurately followed, apply the material evenly onto the substrate and wait for 15 minutes, then start rolling with a spiked roller. The spiked roller is used primarily to smooth and level the surface and will also defoam the Resin TP Excellent UV. The product has a long open time / pot-life, so there is plenty of time to do this.

To achieve a perfectly smooth, high-gloss surface flooring system using Resin TP Excellent UV is quite a challenge so please consider the following points:

- Follow the mixing instructions carefully.
- Use the Quartzline Collomix WK 70 for mixing.
- Make sure you use the Resin TP Excellent UV on a closed substrate.
- Don't start using the spiked roller until the material has been on the floor for at least 15 minutes.
- ALWAYS use the spiked roller, even if the surface looks good enough.
- Make sure you treat all areas with the spiked roller and skip nothing.
- Use a metal spiked roller.
- Always wear spiked shoes.

Processing time after mixing and pre-reaction @ 20 °C	15 minutes
Spike rolling time @ 20 °C	1,5 hours
Foot traffic @ 20 °C	2 days
Fully Cured @ 20 °C	7 days

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

Remarks

Do not apply the Resin TP Excellent UV on substrates with rising moisture.

After application Quartzline Resin TP Excellent UV must be protected from damp, condensation and water for at least 24 hours.

Uneven or dirt covered substrates should not be treated with a transparent casting layer. Both substrate and adjacent areas should always be thoroughly prepared and cleaned prior to application.

Mixed materials must be processed immediately as flow and defoaming will be reduced when pot-life expires.

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

Under certain conditions, underfloor heating combined with high point loading, may lead to imprints in the resin.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both CO² and water vapour which may adversely affect the finish.

For heating, only use electric powered warm air blower systems.

Do not use any underfloor heating during application or for the first 48 hours, after this period you may increase the temperature gradually.

Cleaning/maintenance

To maintain the appearance of the floor after application, the flooring 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 safety handling, storage and disposal 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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