Concrete and Screed Technology

SILICON IMPREGNATION REPOL S 4



> hydrophobic

> long-acting

> open to vapour diffusion

Product description

Ready-to-use, single-component, transparent, solvent-based facade impregnation agent with very good alkali resistance based on an oligomeric siloxane. Forms a hydrophobic surface, where salt efflorescence, moss growth and the formation of mould are reduced and the cleaning capability of the surface is improved. Tested surface protection system as per EN 1504-2

- Protection against penetration of materials

- Regulation of the moisture balance

- Raising the electrical resistance

Outdoors: for impregnating exposed concrete, exposed aggregate concrete, aerated concrete, fibre cement, all types of natural stone, mineral plasters, facing bricks and clinker.

Repol Silicon Impregnation S4 reduces the moisture absorbency of the exterior wall and thus lowers its thermal conductivity - this has a positive effect on the heating costs.

As prophylactic protection against contamination - facilitates the removal of graffiti with graffiti cleaners.

Delivery format:

Container	Outer packaging	Pallet
1 L / BKA	6	378
25 L / BKA		16
5 L / BKA	4	72

Storage:

Can be stored frost-free, cool and dry on wooden shelves in unopened original container: 365 days

Processing

Recommended tools:

Brush, roller, airless sprayer, high-pressure sprayer (solvent-resistant design).

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Processing:

Repol Silicon Impregnation S4 is best applied mechanically using a spray. By setting a lower spraying pressure, fine dusting of the solution should be avoided. Smaller areas can also be processed with a brush or roller. Multiple treatment processes are necessary for highly absorptive substrates.

Technical data

Density	approx. 0.9 g/cm ³
Solid body	approx. 5%
Consumption	0.2 - 0.5 I/m ² per coat depending on the absorbency of the substrate
Volatile matter	approx. 95 %
Wasseraufnahme (lt. ÖNORM EN	< 7,5 %
1504-2)	
Penetration depth (acc. to	> 10 mm (Class II)
ÖNORM EN 1504-2)	
Drying speed (acc. to ÖNORM EN	> 10 mm (Class II)
1504-2)	

Test certificates

Tested in accordance with (standard, classification ...) ÖNORM EN 1504-2

Substrate

Suitable substrates:

Requirements for mineral substrates:

In accordance with the requirements of the IBF Guidelines – Industrial Floors made of reactive resin - the substrate must be dry, load-bearing and free of separating, intrinsic and foreign substances. Residual moisture max. 4 % by weight, measured with the CM device. Substrate temperature greater than 12°C and 3 K above dew point; adhesive tensile strength on average 1.5 N/mm²; adhesive tensile strength smallest single value 1.1 N/mm²

Substrate pre-treatment:

After only 24 hrs., fresh concrete can be handled after stripping. Not suitable for permanently increasing or oppressive moisture. The substrate must be prepared by means of a suitable mechanical process. The more porous the substrate, the deeper the penetration depth. Gaps and cracks over 3 mm must be filled before treating. It must be ensured that adjacent surfaces that are not being impregnated ar

It must be ensured that adjacent surfaces that are not being impregnated are sufficiently covered. Protect windows, wood, plants, etc. from spray.

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Product and processing instructions

Material information:

- If processing outside the ideal temperature and/or humidity range the material properties could change markedly.
- Bring the materials to the proper temperature before processing!
- In order to maintain the product properties, do not add any foreign materials!
- Water dosing quantities or dilution information must be strictly adhered to!
- Check tinted products for colour accuracy before application!
- Colour consistency can only be guaranteed within the same batch.
- The colour formation is significantly impacted by the environmental conditions.
- Carefully open the container and shake the product well!
- Use a scale to mix partial quantities!
- Reactive resins are to be processed as quickly as possible after mixing.
- Water-based systems have only a limited shelf life after dilution with water, which is why quick processing is recommended.
- Always allow primer to dry/harden well.
- Observe the odours caused by solvent-based systems.
- Applied impregnations are mechanically resistant after 3 days and chemically resistant after 7 days at a constant temperature of +20°C.

- With UV loads and the influence of certain chemicals, the surface can discolour or yellow, which does not impair the functionality and usability of the coating.

Environmental information:

- Do not process at temperatures below +5°C!
- The ideal temperature range for the material, substrate and air is +15°C to +25°C.
- The ideal relative humidity range is 40% to 60%.
- Increased air humidity and/or lower temperatures may prolong the drying, setting and hardening time, while lower air humidity and/or higher temperatures will speed it up.
- Ensure adequate ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect against direct sunlight, wind and weather!
- Protect adjacent components!
- The substrate temperature must be at least 3 K above the dew point.
- (The corresponding dew point temperature can be determined via the prevailing relative air humidity and the air temperature from a dew point table.)
- Protect against contaminants (dust, insects, foliage etc.) during the reaction phase!

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Please heed the product data sheets of all MUREXIN products used in the process.
- Keep a genuine original container of the respective batch for later repair work.
- To avoid sediments and visible transitions between work tracks, these are to be processed offset for longer lengths!
- Abrasive, scraping mechanical loads cause wear marks.
- Plasticisers from vehicle tyres can cause discolourations.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Please refer to safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions and disposal.

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Keep away from foodstuffs, beverages and feedstuffs.

- Take off contaminated, impregnated clothing immediately.
- Wash your hands before taking breaks and when finishing work.
- Do not inhale gases/vapours/aerosols.
- Breathing protection:

- Use a breathing filter device for short term or minor exposure; for more intensive or longer exposure, use a self-contained breathing apparatus. Hand protection: protective gloves.

Glove material

- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to manufacturer.

Penetration time of the glove material

- The precise penetration time is to be found out from the protective glove manufacturer and complied with.



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Eye protection: tightly sealed protective goggles. Body protection: protective clothing.

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Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt. This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.