

Steinimprägnierung „ready-to-use“

NANO

Nanoprotect-Steinimprägnierung is an aqueous emulsion of organosilicon compounds (silanes, siloxanes) for hydrophobing, oleophobing and stain-proofing of absorbent mineral substrates with cementitious parts.

Concrete surfaces treated with Nanoprotect-Steinimprägnierung are characterized by outstanding water-repellent properties, without significantly reducing the water vapor permeability and respiratory activity of the concrete. Due to the chemical similarity between the silicatic structures of the concrete and the silane compounds of the Steinimprägnierung, extremely stable covalent bonds between the impregnation and the silicatic matrix of the concrete surface can be formed. The penetration of water and pollutants dissolved therein, e.g. road salt over the pores and capillaries into the interior of the concrete is prevented and damage such as e.g. corrosion of the reinforcing steel. ¹

After the impregnation with Nanoprotect-Steinimprägnierung the surface of the substrate additionally has a long-lasting water repelling and oleophobic effect.

Nanoprotect-Steinimprägnierung dries without glue and without altering the appearance and haptics of the surface. In case of treating extremely soaking surfaces the product might have a slightly color deepening effect.

Suitable for all kinds of soaking cementitious surfaces such as concrete, fibre cement, sand-lime brick, terracotta, clay, sandstone or mineral plasters.

Applicable on travertine, natural stone, marble or granite if the surface is soaking.

In order to protect all kinds of soaking mineral surfaces against graffiti attacks, Nanoprotect-Anti Graffiti Imprägnierung is the right choice.

Characteristics:

- Strong hydrophobic properties
- Waterbased, solvent-free
- Long-time effect
- Resistant against acid rain and salty seawater

Technical data:

Concentrated emulsion based on silane / siloxane



¹The resulting high resistance to aggressive environmental influences could be demonstrated by a freeze-thaw test in accordance with DIN 13 581. Thus, the weight loss of the specimens impregnated with Steinimprägnierung was only 0.03% compared to 28.10% for not impregnated test specimen. Parallel tests with competing stone impregnations were by a factor of 22 higher with weight losses of 0.66% on average. The internal test series was modified in the substrate selection in accordance with DIN 13 581. (Compared to the concrete block required in the DIN test, sand-lime brick blocks were subjected to the freeze-thaw test.)

The stability of the impregnated substrates against alkaline influences is also increased and ensured in the long term. The alkaline test test carried out in accordance with DIN 13 580 showed a water absorption of the impregnated test piece before the alkaline loading of 1.00% by weight (required 7.5% by weight) and the alkali loading of 2.38% by weight (required 10% by weight).

Application:

The surface must be clean and free from grease. Application temperature is above 5°C. Apply by brushing, spraying or flow coating evenly at the whole surface. Highly absorbent surfaces are recommended to coat multiple wet in wet. Deeper absorption prolongs the durability. Connecting surfaces (glass, rubber seals) do not have to be covered. Drying time approx. 4 – 8 hours. Depending on the degree of dilution the complete effectiveness of the impregnation can only be achieved after 3 – 5 days (higher dilution ratio means faster effectiveness). We recommend at least 5 days drying time before testing the effectiveness. Application tools can be cleaned with water. The impregnation retains its effectiveness though the water repelling effect at the surface may decrease. Refresh the coating if needed. Details in the application are dependent on the surface to be treated. We will be pleased to advise you.

Spreading rate:

Depending on application type, surface and required effect the spreading rate and the dilution ratio should be determined by tests.

Care:

After complete drying the surface can be cleaned with a mild tenside or Nanoprotect-Universalreiniger (Mix 1:30 with water). While cleaning make sure that no heavy abrasive effect will be treated on the surface. If possible clean the surface with a soft brush or a soft sponge.

Marking/transport:

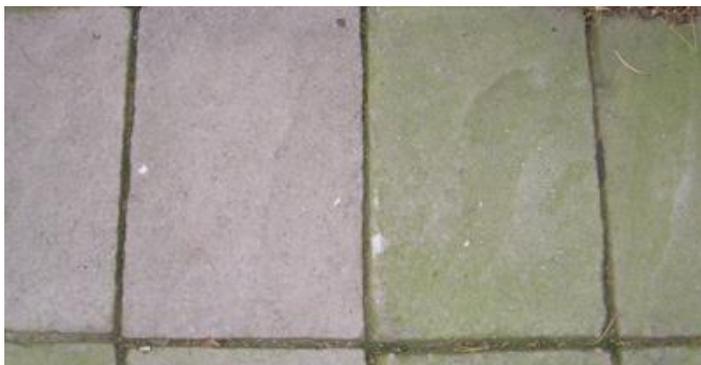
Not considered as dangerous goods by RID, ADR, ADNR, IMDG, IATA-DGR.

Physical health:

Free of free nanoparticles.

Package sizes:

Package sizes are to be agreed depending on the transport way.



Storage:

Minimum 12 months in original closed-up packaging. Protect from frost and direct sunlight.

Safety/Protection Measures:

When using this product please take note of the instructions on the bottle/canister. We wish to make it clear that the use of chemical preparations should only take place when the safety measures are observed and are always out of the reach of children. The technical information given here is according to the latest technical knowledge and composed from our own experience. In view of the many uses possible with this product it is therefore the responsibility of the user to act according to the given situation in respect of safety - that is to say the user acts upon their own responsibility in any given situation when using this product. That the use of this product takes place out of our jurisdiction, we have set out safety and protection measures, but we cannot be held responsible in any circumstances. For any misuse of the product we cannot be held responsible. In the event of a new version of this information becoming available – this information here set out is no longer valid.

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