



Rev 1
03/24



NATEK

Protective impregnating agent – consolidating agent for the treatment of concrete surfaces



DESCRIPTION

NATEK is a ready-to-use, single-component consolidating protective impregnating agent, specifically for the treatment of concrete surfaces. Its particular formulation is based on a solution of polysilicic acid salts and its formulations, which gives it a low viscosity and therefore easy penetration into all absorbent surfaces. It drastically reduces the permeability to water, but not to vapour, increasing the durability of the concrete and in particular the resistance to acid aggression. By allowing moisture to escape, the risks due to freeze-thaw cycles are avoided. NATEK has a consolidating, hydrophobic and protective action on concrete. The product, polished, does not yellow when exposed to UV rays.

FEATURES

NATEK, due to its specific formulation, gives the treated surface the following characteristics:

- It drastically reduces the permeability to water, but not to steam, increasing the durability of the concrete and in particular the resistance to acid aggression;
- By allowing moisture to escape, the risks due to freeze-thaw cycles are avoided;
- Increase in the compressive strength of the surface at 28 days (> to 30%) and therefore in the abrasion resistance;
- Dustproof, protective for prefabricated elements;
- The treated concrete, if polished, does not show any tendency to yellowing, is resistant to washing, resistant to abrasion and vehicular traffic, it is not sticky so it does not give dirt retention;
- After hardening and, after adequate preparation, the treated surface can be covered with the most common epoxy and polyurethane-based systems both in aqueous dispersion and with solvent.

SPECIFICATIONS

Features	Units of Measurement	NATEK
Aspect	-	Colorless or faintly yellow liquid
Smell		ODORLESS
Miscibility with water	-	Unlimited
Density at 20°	g/ml	1.15 ± 0.03
pH (t.q. solution)	-	11.5 ± 0.5
Surface tension at 20 °C	mN/m	28 ± 5
Viscosity at 20 °C	mPa·s	4 ± 3
For porosity concretes	-	Very low
Solvents		ABSENT

SHEET



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VOC	Maximum limit 30 g/L EU Directive 2004/42/EC	< 2 g/L
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APPLICATIONS

NATEK is particularly suitable for the following applications:

- anti-dust and seasoning treatment of floors inside rooms such as garages, warehouses, cellars, etc., and outdoor surfaces such as squares, avenues, courtyards, etc.
- Consolidation and protection of high-intensity floors such as: car parks, airport hangars, logistics hubs, metalworking, canning and manufacturing industries, warehouses, etc.

HOW TO USE

NATEK can be applied by spraying, roller or immersion.

For the **CURING - ANTI-EVAPORATIVE** NATEK treatment, it will be applied to fresh concrete (ABSORPTION BY DIFFUSION) as soon as the helicoptering phases are completed, with a low-pressure airless pump. When NATEK begins to gel (after about half an hour from application depending on the temperature), it is necessary to lightly moisten the product with a spray of water and work the surface again for another 10-20 minutes, with a washer-dryer or with a soft-bristled broom. When NATEK returns to the gel consistency (after about 20 minutes depending on the temperature), you will have to rinse the floor and remove any excess material with a water pump or vacuum cleaner.

For the **CONSOLIDATING-WATERPROOFING TREATMENT**, NATEK must be applied to seasoned concrete for at least 28 days (ABSORPTION BY CAPILLARITY + SILICA-FREE LIME REACTION) with a well-cleaned surface (free from dust, oil, grease, mud, friable parts, paints and in any case from anything that may harm the penetration of the product), possibly flat and dry to the touch. It is necessary to put the NATEK on the surface to be treated until it is rejected (then add until the floor no longer absorbs product), the important thing is that it does not dry before it has penetrated deeply. If the absorption of the liquid is slow, moderately moisten the treated surface with occasional splashes of water, without exaggerating so as not to dilute the impregnating solution excessively. To ensure maximum penetration, always keep NATEK moving on the surface with a soft-bristled broom or scrubbing machine (10 to 40 minutes depending on the temperature), until the product begins to gel and become slippery. Lightly moisten the material with a splash of water and re-work it on the surface for another 10-20 minutes. After this process, rinse the floor and remove any excess material with a water pump or vacuum cleaner. For large surfaces, mechanical equipment such as industrial cleaning machines can also be used.

12 – 24 – 48 hours after the first application, if the treated surface is still absorbent, reapply NATEK until the pores are saturated. Remove any liquid that has not been absorbed and allow the surface to dry.

After 3 days from the 1st application, you can flood the surface with water and check its waterproofing. On very old concrete, it is preferable to precede the application with a 5% solution of calcium nitrate or calcium acetate.

Clean all equipment with water immediately after use.

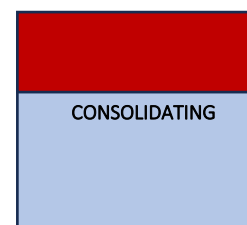
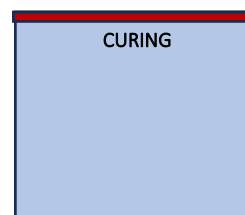
The hardened material can only be removed mechanically

SURRENDER

The consumption of NATEK varies with the porosity of the substrate, the roughness of the surface, etc., approximately from 0.10 to 0.25 litres/m².

STORAGE

NATEK is stable when stored in tightly closed iron, steel and plastic containers at a temperature between +5 ÷ +50°C.





WARNINGS

Avoid contact with amphoteric metals (aluminium, zinc, etc.), acidic or acidogenic substances and substances of an organic nature.

PACKS

25 kg jerry cans

210 kg drums

1100 kg tanks

LEGAL

The information contained in this data sheet, although it represents the most advanced stage of knowledge, does not exempt the user from carrying out accurate preliminary tests in his own conditions of use and operation. We therefore decline any responsibility for improper use of the product.

