

NANOSEAL®

Lithium and polymer based agent for the curing, strengthening and sealing of concrete surfaces

PRODUCT DESCRIPTION

NANOSEAL is a highly-efficient chemical agent for the curing and sealing of concrete surfaces. The most advanced technology using elements of NANOTECHNOLOGY® of polymer, silicate and lithium compounds of the highest silicate modules allows to obtain a highly-resistant cement matrix of extreme physical and chemical properties thanks to the penetration and strengthening of concrete at the molecular level. Additional modification with a specially selected polymer binding agent provides the maximum level of sealing the concrete by bonding those ingredients of the concrete matrix that are devoid of free calcium compounds. The agent based on lithium silicate deeply penetrates the surface of concrete and by entering into reaction with free calcium hydroxide creates a hard, resistant, tight and coherent structure. Thanks to the application of NANOSEAL, the surface is protected against dusting, penetration of liquid substances (oil, salt solutions), moisture and alkaline blooming. Hard, abrasion resistant surface still remains a vapour-permeable structure, which prevents the creation of destructive pressures inside the floor plate. A surface protected with NANOSEAL is easy to keep clean.

USE

To be used on old and newly-made concrete floors in warehouses, production halls, food and pharmaceutical production plants, commercial and religious facilities.

ATTENTION: As it is modified with polymers, the product is not to be used in the polished concrete technology. Best results are obtained on concrete floors floated mechanically.

PRODUCT CHARACTERISTICS

- Protects concrete against quick evaporation of water
- Reduces to minimum the creation of contraction cracks
- Provides protection against dusting by increasing resistance to abrasion
- Limits the absorption of oils, thus increasing the protection against dirt
- Easy application
- Ready to use.

APPLICATION CONDITIONS

The substrate and ambient temperature should be between 5°C and +30°C.

MIXING

NANOSEAL is provided ready to use. Mix the contents of the pack thoroughly.

Protect from freezing.

APPLICATION

NEWLY-MADE FLOORS:

After floating, and when the floor can be stepped on without a risk of impressing a shoe mark on it, the preparation should be sprayed evenly on the dry surface in the amount of 0.1 – 0.2 l/m² until it is covered completely.

The surface should stay wet for 15-20 minutes. An additional amount of the NANOSEAL should be applied in places where it dries faster – a microfiber mop helps distribute the agent evenly and maintain the surface wet for the necessary time. The application should not be delayed, as it will decrease its effectiveness. When the surface dries, you may go on to the next step of protection which is the polishing of the floor using NANOCOAT in accordance with its technical specification. Uneven distribution or leaving puddles of NANOSEAL may result in the creation of white salt blooming on the floor. Should this occur, the floor must be cleaned using an automatic scrubber in order to remove all sediments, before the application of NANOCOAT.

ATTENTION: It is recommended that the floor be maintained dry for 3-7 days after the work, as this will allow to avoid surface salt blooming. The declared resistance and strength will be reached after about 30 days from the application. During use the surface will increase its hardness, strength and gloss. In case of dusting and porous surfaces, the amount of preparation used will differ from the recommended one. It is recommended that NANOSEAL be applied on a trial area first.

EXISTING FLOORS:

The surface of the floor must be homogenous and free from impurities. Before applying NANOSEAL, all impurities (dirt, dust, oil spills, impregnations, surface care products) should be removed mechanically and all defects and damages repaired. In order to provide the best result on dusting surfaces, it is recommended that the surface be polished before application to remove the weakest layer of the floor.

Then spray NANOSEAL in the amount of 0.2 – 0.25 l/m², making sure the surface remains wet for 15-20 minutes. An additional amount of the agent should be applied in places where it dries faster – a microfiber mop helps distribute NANOSEAL evenly and maintain the surface wet for the necessary time. In case of porous or dusting surfaces, it is recommended that another layer of the agent be applied. The other layer should be applied after the first one has dried. When the surface dries, you may go on to the next step of protection which is the polishing of the floor using NANOCOAT in accordance with its technical specification. Uneven distribution or leaving puddles of NANOSEAL may result in the creation of white salt blooming on the floor. Should this occur, the floor must be cleaned using an automatic scrubber in order to remove all sediments, before the application of NANOCOAT.

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CLEANING TOOLS

The equipment and tools should be cleaned with water immediately after use.

SAFETY MEASURES

Rooms in which works are carried out must be well ventilated. Workers should use protective clothing, shoes, glasses and gloves. In case of contact with the skin, immediately wash the soiled places with water with soap. This is an alkaline preparation which may irritate the eyes and skin. In case of allergic reaction consult your physician. The preparation is harmless to the environment. Keep out of the reach of children.

MISCELLANEOUS INFORMATION

All the information herein refers to products stored and used according to our recommendations, has been presented in good faith and takes into account the current state of knowledge and experience of BAUTECH. You are obliged to use the product in accordance with its intended purpose and BAUTECH's recommendations. All the technical information provided is based on laboratory tests and trials. Out-of-laboratory tests may give different results due to the conditions, location, manner of application and other circumstances that are out of BAUTECH's control. Any different recommendations issued by our employees must be made in writing; otherwise, they shall be deemed null and void. These instructions replace all the previous ones and make them void.

PACKAGING

20 l, 200 l

BAUTECH Sp. z o.o.

ul.Staszica 25, 05-500 Piaseczno, Poland

phone +48 22 716 77 91; fax +48 22 716 77 90

e-mail: bau@bautech.eu; www.bautech.eu

STORAGE

6 months from the date on the packaging, if stored in original, tightly closed packaging, in ventilated rooms, at the temperature between 5°C and 25°C. Protect from direct sunlight.

PROTECT FROM FREEZING!

TECHNICAL DATA

Density, g/cm ³	about 1,0
Efficiency depending on the absorptivity of the surface	1 litre / 4 - 10 m ²
Amount of layers	1 or 2
Drying time, 20°C	about 1 - 2 hours
Chemical resistance	oils, coolants, ethyl alcohol, detergents etc.
Application temperature	from +5°C to +30°C
Consumption, l/m ²	0,10 - 0,25
Increased resistance to abrasive wear on Boehme disk compared to model concrete	by 30%
Decreased velocity of water evaporation as compared to model concrete according to EN 13579 :2002	by 27%
Decreased absorbability as compared to model concrete according to EN 1062-3	by 55%