INOCOT





Technical Information

INOCOT 611

Silicate based agent for the permanent densification and hardening of concrete and cementitious systems

Description

INOCOT 611 is a lithium silicate for the permanent consolidation and hardening of surfaces based on cement-bonded materials. The colorless, incombustible liquid is free of volatile organic compounds.

INOCOT 611 significantly improves the surface quality without affecting the properties of the cemented surface. An additional application of glue, paint or plaster is possible. In contrast to synthetic resins, which only adhere to the surface, INOCOT 611 penetrates into the surface and reacts with the hydration product of the concrete.

Advantage

The application of lithium silicates is easier and less time consuming than the use of standard silicates. Thanks to their higher reactivity they don't need to be scrubbed to the surface to promote the reaction. They are characterized by the following advantageous properties:

- Lower viscosity and alkalinity
- Very reactive and more efficient
- No expansion of the concrete due to the lithium reaction
- Deeper and more complete concrete penetration
- Can be applied to new or existing concrete

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Physical Properties

Properties	lithium silicate
Appearance	colorless liquid
Odor	odorless
Combustibility	incombustible
Density	1.25 g/cm^3
Active Content	28%
Dilution	recommended: 1 to 1 by weight
Required quantity of application	0.2-0.4 kg/m^2 [1]
Minimal waiting time for the product to penetrate	30 min
Curing time	> 30 days (accessible after a few hours)

[1] The values are approximations. Differences in the concrete quality, porosity and the ambient conditions during the application can influence the required quantity.

Mixing and application

Before the application INOCOT 611 has to be diluted to the solid content needed. For that purpose the product can be diluted with clean water 1 to 1 by weight. The dilution must be done carefully by slowly addition and gently mixing of the water in order to avoid foam formation. It is necessary to wait until the foam has settled before application.

The diluted product can be applied on all calcareous substrates such as polished or unpolished concrete, screed or mortar surfaces. The application is possible on both new and existing concrete floors outdoor and indoor. If in doubt it is recommended to make a field test.

The task can be done by wet mop, spray or roller. The surface should always be kept wet during 20 to 30 minutes to allow INOCOT to penetrate completely into the surface. An additional application has to be done where required. After 1 hour the supernatant product has to be removed manually or by suitable mechanical treatment.

Processing information

The surface to be treated has to be dry, solid and absorbent (porous). Before treatment please ensure that the surface is clean and free of contamination. Oil, grease and other adhesion-reducing impurities can affect the mode of action of the product.

Please avoid direct exposure to sunlight during the application. The ideal temperature of the surface to be treated is between +5℃ and +35℃. A direct exposure to moisture should be avoided until curing is complete.

The drying time is about 2 to 3 hours, afterwards the floor is accessible. The effective drying time can vary from this value due to the humidity. The completion of the reaction can take up to two weeks. Therefore it is recommended to access the surface only the day after the application.

Cleaning recommendations

The equipment needed during the application has to be cleaned after use with water. Once the product has dried it can only be removed mechanically.

It is recommended to clean the treated floor only with water or a slightly alkaline cleaning agent. Acidic detergents (containing citric acid) should not be used.

Regular wet cleaning activates the additional crystal formation in the concrete while the floor becomes harder and more chemically resistant. For cleaning, machines with nylon pads or rotating brushes can be used.

Storage

For detailed information, please check our "Guidelines - Storage and handling of liquid silicates" on our web-site www.vanbaerle.com.

Classification and safety

Consider the common precautions for using chemical products. Please read the information in the safety data sheet.

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Your partner for high quality silicates.

In 1888, vanBaerle started out as a soap factory. Ten years after its foundation, the company moved to its present location in Münchenstein and developed into a dynamic and innovative enterprise. With its business units Hygiene and Silicates, it is represented in more than 50 countries in Europe, Asia and North America. The company has 134 employees in its headquarters and its affiliated companies.
The production plants of the business units Hygiene and Silicates, the laboratories for development, application technology and quality management, as well as the warehouses and the administration buildings are all located at the Münchenstein site.

We have been transforming basic minerals into valuable products for more than 100 years. In this time, we have optimized the established products and introduced many innovations. Today, silicates are important additives for a whole range of industries and can be found in many products. Silicates are used in welding rods, waste paper recycling, and detergents. They can bind pigments and cement, glue materials and protect and isolate buildings. And the good news is that the list of applications keeps constantly growing.

Legal notice

The technical details and recommendations are based on the best of our knowledge and they presume a proper storage and usage of the products. Due to the variety of possible substrates, materials and working conditions a guarantee or a liability can not be taken for the work result, whatsoever the legal relationship are. Before each use, the products must be tested for their suitability for the intended application and purpose. In any case, the user is responsible for the consequences arising from the use of the products.

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Above mentioned information is based on the current knowledge and may change according to technical progress. No guarantee on product data.