

KORATECT® C 1

Brief description

KORATECT® C 1 is a pasty, aqueous, solvent-free, silane-based waterproofing agent. **KORATECT® C 1** was specifically developed for use on concrete and reinforced concrete, but it is also suitable for the impregnation of other building materials such as clinkers, limestone or plaster.

Product properties

Features:

- Significant reduction in water absorption without changing the colour or texture of building materials
- Water vapour permeability is maintained
- Optimum resistance to alkalis, so also suitable for the treatment of fresh concrete for example
- Excellent penetration properties
- Strong protective effect against freeze/thaw cycles
- Significant reduction in salt uptake (e. g. de-icing salts)
- Significant reduction in the formation of efflorescence
- Good paint adhesion, making it suitable as a deep primer
- Solvent-free, low odour, aqueous and environmentally friendly
- Thixotropic, which means it can be applied without loss

Compared to conventional liquid products, **KORATECT® C 1** is characterised by its thixotropic consistency as a waterproofing agent. Hence, the impregnating paste can conveniently be applied in the desired coating thickness, without the risk of uncontrolled dripping of the product. Multiple applications are also possible in order to increase the penetration depth of the product. The silane-based active substance combination usually penetrates the building material within 30 to 60 minutes, where the active substance is polymerised by a chemical reaction with the elimination of ethanol, and so fixed permanently. The milky-white cream disappears without leaving any residue. The breathability of the building material is not adversely affected by the special active substance. In poorly absorbent substrates, this process can last several hours.

KORATECT® C 1 is particularly suitable for use on high-quality concrete and reinforced concrete.

KORATECT® C 1 was designed such that it can achieve deeper diffusion due the small molecular size. This has a particularly positive effect on specific parameters such as freeze/thaw resistance. The uptake of salts (in particular of de-icing salts) or the formation of efflorescence is significantly reduced. KORATECT® C 1 also significantly reduces corrosion processes in steel-reinforced concrete. On strong absorbent substrates KORATECT® C 1 forms no residue on the surface of the building material and is therefore also suitable as a deep primer for paints and plasters. Unlike traditional masonry protection agents, KORATECT® C 1 shows no pronounced beading effect.



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Finishing

Using the airless method, **KORATECT® C 1** is preferably applied undiluted in the desired coating thickness on the building material. A brush, lambs wool roller or putty knife can also be used for smaller areas. Depending on the absorbency of the substrate it is possible to apply quantities of up to 300 g/m² in a single pass, even on vertical surfaces and ceilings, without material loss. In low-absorbent substrates not more than 200 g/m² should be applied in one pass, as full penetration by the impregnating agent can take several hours in this case. The risk of residue formation on the surface as well as uncontrolled run-off of the product increases if larger quantities are applied. A second application of **KORATECT® C 1** is always possible, but usually not necessary. Consumption is usually between 200 g/m² to 400 g/m². Coverage depends on the finishing, substrate and consistency, among other things. The specified consumption data is only given for orientation purposes. Accurate consumption data must be determined on the object if necessary.

The product should be applied to surface dry building materials. Ideally, concrete should only be treated after 4 weeks, but at the earliest after two weeks. The surfaces to be treated must first be cleaned of all coarse dirt. Weathered or already soiled surfaces should be thoroughly cleaned using a steam cleaner where required.

Surfaces freshly treated with **KORATECT® C 1** must be protected from rain. Avoid the impregnation of surfaces during rain.

If **KORATECT® C 1** should be applied as a deep primer, it is advised to prepare sample surfaces to ensure adequate adhesion of the coating to follow.

KORATECT® C 1 should not come into direct contact with bitumen. The resistance of insulation against **KORATECT® C 1** must be checked in each particular case depending on the temperature.

Product information*

Appearance : White paste

Active substance content in % (w/w) : 80

Density at 20 °C in g/mL : 0.9

pH value : 7.0

Flash point in °C : 64

Shelf life

Sealed in its original container and at storage temperatures between +5 °C and +40 °C, KORATECT® C 1 has a shelf life of 12 months.

If the product is stored for longer than the date or period specified on the label, it does not necessarily mean that the product is unfit for use. In this case a review of the property values required for the intended use is essential for reasons of quality assurance.

Miscellaneous

For the use of **KORATECT**® **C 1** in OS 1 surface protection systems for concrete as waterproofing impregnation, please observe our separate data sheet "**KORATECT**® **C 1 System**".



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For more information on product safety and handling, please refer to the safety data sheet.

Our technical advice whether spoken, written or through test trials is given to the best of our knowledge, is to be understood as non-binding in character and in relation to any possible industrial property rights of third parties; it is not a substitute for your, the buyer's, own tests and trials on the products supplied by us to determine whether they are suitable for the intended processes and purposes. The application, use and processing of the products are beyond our control and, therefore, entirely your own responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you. Of course, we guarantee the perfect quality of our products according to our general terms and conditions.

*This information is intended as a guide and should not be used in preparing specifications

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