Chemical products for the
paint and construction industry

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Partner für chemische und technologische Produkte

Technical Data Sheet

Silsan® Cream CT-L

Silicone impregnating agent

Product description

Silsan® Cream CT-L is a VOC-free impregnating cream based on silanes and siloxanes. It provides long-lasting and reliable water repellency to mineral substances such as brickwork and façades.

Silsan® Cream CT-L is specially designed to be used for wall injection against rising damp as well as for surface application.
Furthermore, Silsan® Cream CT-L provides brickwork and façades with comprehensive protection for against efflorescence and damage by water soluble pollutants. It also protects against frost damage and attack by micro-organisms.
The physical properties of the construction material, especially its water vapour permeability (sd-value), are barely affected by this product.

Silsan® Cream CT-L is a high viscosity cream which exhibits the following characteristic properties:

- simple, drip-free application with trouble-free overhead workability
- extremely high concentration of active ingredients (approx. 80 %)
- alkaline resistant
- leaves no residual film
- dissipates easily within the masonry
- excellent penetration depth due to the long contact time with the masonry surface
- can be applied without any loss, in one single step and without running
- easy to pump and dose
- causes only little discoloration or intensification of the masonry surface colour

Silsan® Cream CT-L is suited to be used with any kind of mineral substances, such as:

– mortars
– plaster
– concrete
– limestone
– natural stone
– industrially made bricks and clinker

Application

Silsan® Cream CT-L has a very high active content of 80 % and is used in concentrated form without dilution with solvents or water.

The method of application depends on the purpose for which the product is required:

- Hydrophobing / façade impregnation:

Silsan® Cream CT-L can be applied by roller or brush. Its creamy character enables easy, drip and run-free application on walls and

Graf & Co. GmbH Technologie Service Im Farchet 4 83646 Bad Tölz www.graf-chemie.com
Tel: +49-(0)8041-7607-0 Fax: +49-(0)8041-7607-25 e-mail: info@graf-chemie.com

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ceilings. In general, a single application of Silsan® Cream CT-L is sufficient, with very dense, high-quality concrete, a quantity of only 150 g/m² is required.
Application quantities of up to 300 g/m² are possible.

The silane/siloxane active ingredient penetrates the substrate between 30 minutes and several hours, depending on the porosity of the substrate. The milky-white cream disappears without leaving any residues.
On dark stone surfaces, Silsan® Cream CT-L may cause a slight colour intensivation.

Once the cream has penetrated the masonry surface entirely, the brickwork is protected against moisture and water attack.

- Wall draining / drill hole injection:

Silsan® Cream CT-L is mainly designed to be used for wall draining by means of drill hole injection.
Silsan® Cream CT-L is suitable to be effectively used at wall moisture levels of up to 80 %.
The product forms a long lasting silicone barrier inside the wall, reliably protecting the entire building from rising damp and allowing the brickwork above the injection layer to dry. In order to aid the drying process we recommend undertaking additional measures to eliminate the source of humidity.

Silsan® Cream CT-L comes ready to use and is injected into holes drilled into the brickwork without any need for a pressure system.

Due to its perfect spreading properties and its extremely fine molecular structure, the product is able to spread deeply into the areas around the drill holes, forming a seamless silicone barrier against rising damp.

The injection holes are usually drilled at ground level (outside) or at floor level (inside). The bore holes should have a diameter of approx. 12 mm. The distance between the individual bore holes should be approx. 12.5 cm. If possible, they should be drilled horizontally and directly into the mortar joint in one line next to each other. The depth of the boreholes should be approx. 3 cm shorter than the thickness of the wall.
In order to gain best results, the bore holes should be cleared of dust and drilling residue before injection.

The injection is typically made with special injection guns or pumps.
It is imperative that the drill holes be completely and entirely filled with cream, free of air bubbles. The injection tube, which should be at least as long as the depth of the holes, must be totally inserted into the bore hole. In order to fill the holes completely, the injection tube must be withdrawn slowly while injecting the Cream into the hole.
Cream deposits that, due to possible over-dosage, accumulate around the bore hole entrance, can be wiped off with an absorbent cloth.

Finally, the filled holes must be sealed with rapid-hardening mortar.

Storage stability

The packages must not be exposed to direct sunlight or frost.
A storage temperature within a range of + 5 to + 25 °C must be guaranteed.

In originally sealed containers,
Silsan® Cream CT-L may be stored for maximum of 12 months after the date of dispatch.

Even after shelf life has expired, the product isn't necessarily unfit for use. However, in such case, we highly recommend to inspect the product regarding a potential infestation of bacteria and fungus.

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Product properties of Silsan® Cream CT-L	
Properties	**Value**
Composition	high viscosity cream based on silanes and siloxanes
VOC content	VOC-free
Appearance	milky, white, pasteous
Concentration	approx. 80 %
Flashpoint	n.a.
Viscosity (at 20 °C)	n.a.
Density (at 20°C)	approx. 0,9 g/ccm
pH value	n.a.
Packaging*	plastic drums, metal buckets, tabular bags
Storage stability	approx. 12 months at + 5 to + 25 °C

Note:
These figures are only intended as a guide and should not be used in preparing specifications.

** Packaging and transport information:*

For reasons of safety during the transportation, please observe the following packaging units when placing your order:

50 kg plastic drums:	6 x 50 kg or 12 x 50 kg on a pallet
125 kg plastic drums:	5 x 125 kg on a pallet
13 kg metal buckets:	6 x 13 kg per layer on a pallet, up to 3 layers per pallet single shipping possible
0,54 kg tubular bags:	15 carton per layer on a pallet, up to 4 layers per pallet, 1 carton (12 x 0,54 kg)

Special storage and recommendations for use:

- Store the product in a cool, dark place
- In order to prevent contamination with bacteria and fungus spores from the ambient air, the containers should only be opened to remove the product required and be subsequently closed once more. In particular when using plastic drums, see that no dust or dirt form the atmosphere falls into the open drum.
  Close the drum immediately after the product has been taken out.
- When a dipper is used, it must be cleaned thoroughly before immersion.
- Once the containers have been opened, use up the complete contents as quickly as possible.

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Graf & Co. GmbH
Technologie Service
Im Farchet 4
D- 83646 Bad Tölz

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EN 1504-2:2004

Surface protection products – hydrophobic impregnation
EN 1504-2: ZA. 1a

Depth of penetration	**Class II: ≥ 10 mm**
Water adsorption and resistance to alkali	Absorption ratio < 7,5 % compared with the untreated specimen < 10 % after immersion in alkali solution
Drying rate for hydrophobic impregnation	**Class I: > 30 %**
Loss of mass after freeze-thaw salt stress	Weight loss requirements fulfilled after at lest 20 cycles, compared with untreated specimen
Hazardous substances	**Complies with EN 1504-2, 5.3**

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials in order to provide for local processing conditions over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

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