



## Technical Data Sheet Art. No. 0711

# Funcosil FC

Impregnation cream in emulsion form on a silane base



For use outdoors



Working temperature  
+5 °C  
+25 °C



Brush/roller /  
airless/airmix  
spraying



Total  
application rate  
150-200 ml  
Total  
1 m<sup>2</sup>



Store frost-free  
and cool,  
protected  
from moisture  
in closed  
containers



Shelf-life  
12 Month

### Range of use

Funcosil FC is especially used for hydrophobizing impregnation of porous, mineral building materials.

### Property profile

Funcosil FC is a special product for hydrophobizing impregnation of brick, clinker, sand-lime brick, silicate types of natural stone, e.g. OBERNKIRCHENER SAND-STEIN® and mineral render.

### Characteristics:

- Reduction of water absorption with simultaneous
- high diffusion capacity
- Excellent penetration capacity
- Best possible resistance against alkalis
- Strong protective effect against frost/de-icing salt loads
- Cream form and can therefore be applied without loss
- Can be worked over-head
- Early rain tight

Funcosil FC is excellently suited for hydrophobizing mineral building materials.

As opposed to conventional liquid

### Characteristic data of the product

#### Characteristic data of the product in the packaged state

Active ingredient content: approx. 40 % by mass  
Density: approx. 0.84 kg/l  
Flash point: > 61 °C  
Appearance: milky, white, creamy

#### Characteristic data of the product after formation of active ingredients

Reduction of water absorption: very good  
UV-stability: very good  
Long-term effect: > 15 years (experience)  
Alkali resistance: up to pH 14

products, Funcosil FC can be applied in just one working operation. Depending on porosity, the active ingredient penetrates into the substrate where it reacts and becomes a polysiloxane. The initially white layer disappears completely after approx. 10 to 20 minutes.

Funcosil FC has been designed so that the active ingredient penetrates as deeply as possible into the facade which provides optimal protection against the absorption of water and pollutants and therefore also damage caused by frost/de-icing salt.

Funcosil FC's water repelling effect takes longer to develop and is improved by rain.

### Substrate

The substrate must be in sound condition. Structural defects such as cracks, cracked joints, defective connections, rising damp and hygroscopic moisture must be remedied before impregnation is carried out.

It must be ensured that water and salts that cause damage dissolved in the water cannot migrate behind the hydrophobized zone.



Surfaces that are to be impregnated often have a crust/patina made up of various types of soil that reduce the absorption capacity of the building material.

To restore the original absorption capacity, cleaning measures are required that should be as gentle as possible, e.g. by spraying with cold or warm water or by steam cleaning; stubborn soiling is preferably removed with the Rotec Low Pressure Blaster or with one of the Remmers facade cleaning products (see Technical Data Sheets for the respective products).

When cleaning, make sure that the building substance is damaged as little as possible.

Residue (e.g. surface active agents) from previous cleaning measures could impair the hydrophobizing effect and must be completely washed off first.

Substrates with very little absorption capacity and strongly textured surfaces should be treated with Funcosil SNL or Funcosil WS.



#### State of the substrate:

Absorption of the impregnation agent is a prerequisite for the best possible effect. This will depend on

the respective pore volume and moisture content of the building material. For this reason, the substrate should be as dry as possible.

High concentrations of damaging salts lead to severe damage that cannot be prevented by a hydrophobic impregnation.

#### Adjacent surfaces:

Building elements that should not come in contact with the impregnation agent (e.g. glass, lacquered surfaces and surfaces to be lacquered as well as plants) should be protected by suitable means (e.g. covered with plastic sheets).

#### Directions

Funcosil FC is applied by roller (long-haired lambskin roller), brush or airless equipment.

Depending on the absorbency of the substrate, application rates of up to 0.2 l/m<sup>2</sup> can be applied in one working operation even on vertical surfaces and ceilings without a loss of material.

#### Working temperature:

Hydrophobizing impregnation is preferably carried out at temperatures between +5 °C and 25 °C. Sun awnings can be used to prevent surfaces from heating too strongly. At temperatures below 10 °C, evaporation of the carrier and formation of the active ingredient may be considerably delayed.

#### Rain tight:

At the earliest after 60 minutes or after the cream has been completely absorbed.

#### Notes

To prevent constituents in the product from entering the building, close all windows, doors and other openings during impregnation work; after the impregnation agent has dried, ventilate living space thoroughly.

#### Testing the effectiveness

Water absorption on mineral building materials before and after a hydrophobizing impregnation can be determined with the aid of the

Funcosil Test Plate (Art. No. 0732) or with the Funcosil Test Tube (Art. No. 4928) developed by Professor Karsten. Testing should be carried out at the earliest 6 weeks after the hydrophobizing measures and the results recorded. The measured data should be recorded.

#### Tools, cleaning

Long-hair lambskin roller, brush

#### Airless nozzles:

No. 523; 50° spraying angle, 0.023 inch bore

Nr. 421; 40° spraying angle, 0.021 inch bore

Tools must be clean and dry. After use and before longer interruptions clean tools thoroughly with water.

#### Packaging, application rate, shelf-life

##### Packaging:

0.75 l, 5 l and 15 l plastic buckets

##### Application rate:

Depending on porosity approx. 0.15 to 0.20 l/m<sup>2</sup>. Impregnation agent requirements for calculation and tender should be determined on a sufficiently large trial area (1-2 m<sup>2</sup>). The effectiveness of the impregnation can also be checked on this surface.

##### Shelf-life:

At least 12 months in closed, original containers stored cool but frost-free at temperatures between 0° and 30° C.

#### Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.

**Personal protective equipment is required for spraying procedures. Respiratory protection with a combination filter at least A/P2 (made by e.g. Draeger). For suitable protective gloves, see Safety Data Sheet. Wear closed work clothes.**

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

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