



## Technical Data Sheet Art. No. 0614

# Funcosil WS

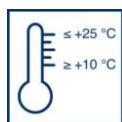
Water based, hydrophobizing impregnation agent on a silane/siloxane base



Water based



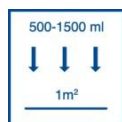
For use  
indoors and  
outdoors



Working  
temperature



Brush/roller /  
low pressure  
spraying



Application  
rate per  
working  
operation



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



Shelf-life

### Range of use

Remmers Funcosil WS is used to hydrophobize porous, mineral building materials such as sand-lime brick, natural stone, fair-faced brick masonry work, mineral renders, aerated and light-weight concrete. It can also be used to subsequently treat water glass paint coatings.

### Property profile

- Single component, environment-friendly, water based impregnation agent.
- Excellent water repellency
- Pronounced penetration even on damp substrates
- Alkali stability
- Dries clear
- Practically odourless
- No emission of pollutants
- Greater job safety

### Substrate

Before applying the impregnation agent, dirt, pollutant crusts, efflorescence, alga and moss infestation must be removed from the substrate by a suitable cleaning procedure. Cleaning opens the

### Characteristic data of the product

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

Active ingredient:	alkyl alkoxy silane
Active ingredient content:	approx. 10% by mass
Carrier agent:	water
Density:	1.0 kg/l
pH value:	neutral
Appearance:	milky

#### After application and formation of active ingredients

Water repellency:	very good
Water vapour diffusion capacity:	given
UV stability:	very good
Weathering resistance:	very good
Long term effect:	very good
Alkali resistance:	given
Tack-free drying:	given
Tendency to soil:	very little

capillaries and pores and allows the impregnation agent to be absorbed. Cleaner residue (e.g. surface-active agents) from prior cleaning measures must be thoroughly washed off since they reduce the effectiveness of Funcosil WS.

#### State of the substrate:

Absorption of the impregnation agent is a prerequisite for optimal surface treatment. The impregna-

tion effect depends on the respective pore volume of the building material and its moisture content. The substrate should thus be as dry as possible.

**High concentrations of salts can cause severe damage to the building which cannot be prevented by a hydrophobizing impregnation.**

### Adjacent surfaces:

Facade elements that are not to be impregnated such as (e.g. glass, varnished surfaces or surfaces to be varnished) and also plants should be covered with plastic sheets. Solvent-sensitive elements such as e.g. bitumen or polystyrene are not attacked.

### Directions

Apply Funcosil WS generously in a low pressure flow coating procedure, using a wide spray nozzle, so that a 30 - 50 cm long film of liquid runs down the surface of the building material. While applying, the nozzle should be led along the facade and the material immediately worked over with a brush. This process is repeated several times. Funcosil WS is to be applied, wet-on-wet, from top to bottom. To avoid missing places, limited sections should be completely impregnated without interruption at a time. For smaller, complicated surfaces that do not allow a spraying procedure, work can be carried out with a brush. The only way to avoid insufficient application rates is to saturate the brush well.

Freshly treated surfaces should be protected from driving rain for at least 5 hours. Strong wind and sunlight can accelerate the evaporation of the carrier agent which negatively influences penetration depth. Funcosil WS can also be applied to slightly damp building materials.

### Working temperature:

Hydrophobizing impregnation measures can be carried out at temperatures between 10°C and 25°C. Strong heating of the surfaces through sunlight can be avoided by using awnings. At tem-

peratures below 10°C, evaporation of water (carrier agent) can be delayed. The full effectiveness of the impregnation develops 1 - 2 weeks after treatment, depending on weather conditions.

### Notes

Water based impregnation agents may activate salts in the facade, causing efflorescence to form on the surface of the facade during the drying process. Colour intensification may also occur with some types of natural stone. We recommend preliminary examinations and trial surfaces.

### Testing the effectiveness

Water absorption on mineral building materials before and after hydrophobizing impregnation measures can be determined with the Funcosil Test Plate (Art. No. 0732) or with a test tube developed by Prof. Karsten (Art. No. 4928). Testing should be carried out at the earliest 4 weeks after impregnation and the measured data recorded.

### Tools, cleaning

All non-corroding low pressure, conveyor and spraying equipment and liquid pumps can be used. The equipment must be clean. After use and before longer pauses they should be cleaned thoroughly with water.

### Packaging, application rate, shelf-life

#### Packaging:

Plastic canisters 5 l and 30 l

#### Application rate:

Sand-lime brick, smooth:  
at least 0.5 l/m<sup>2</sup>  
Sand-lime brick, cleft:  
at least 0.7 l/m<sup>2</sup>  
Brick, fair-faced masonry:  
at least 0.8 l/m<sup>2</sup>  
Brick, coarse-pored:  
at least 1.5 l/m<sup>2</sup>  
Light-weight concrete:  
at least 1.0 l/m<sup>2</sup>  
Natural stone, fine-pored:  
at least 0.8 l/m<sup>2</sup>  
Natural stone, coarse-pored:  
at least 1.5 l/m<sup>2</sup>

The quantity of impregnation agent required for calculation and tender should be determined on a sufficiently large (1-2 m<sup>2</sup>) trial area. The effectiveness of the impregnation measures can also be tested on this surface.

#### Shelf-life:

At least 12 months in closed, original containers stored cool but frost-free.

### Safety, ecology, disposal

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

**Personal protective equipment is required for spraying. Use respiratory equipment with a P2 particle (made by, e.g. Dräger). 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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