





# Funcosil IC

Aqueous, solvent-free impregnation cream on a silane base

Availability			
Quantity per pallet	64	16	2
Size / Quantity	5 l	30 l	180 l
Type of container	Plastic bucket	Plastic bucket	Tin drum
Container code	05	30	67
Art. no.			
0710			

## Application rate



Depending on porosity: approx. 0.2 - 0.5 l/m<sup>2</sup>

Apply to a large enough trial surface (1-2 m²) to determine the precise amount of impregnation agent required.

# Range of use



■ Deep hydrophobising of concrete and reinforced concrete in bridge, road and building construction

- Protects against the ingress of de-icing salt
- Protects against damage caused by frost and de-icing salt

# Property profile



- Improves resistance to frost and de-icing salts
- Repels water
- Enables water vapour diffusion
- Highly concentrated (80% active ingredient content)
- Alkali-resistant
- Excellent long-term effect
- Tested according to the additional technical terms of contract and guidelines for civil engineering works (ZTV-ING), the technical terms of delivery and technical test regulations for surface protection systems (TL/TP OS-A) and the German Committee for Structural Concrete guidelines for the protection and renovation of concrete structures, surface protection systems (DAfStb, RL-SIB OS 1)
- Listed in BASt
- Can be applied sparingly, with absolute precision and with no losses
- Outstanding penetration
- Solvent-free
- UV-resistant

# Characteristic data of the product

Carrier material	Water
Density (20 °C)	Approx. 0.90 g/cm <sup>3</sup>
Active ingredient	Silanes/siloxanes
Active ingredient content, % by mass	Approx. 80
Flash point °C	Approx. 74
pH value	Approx. 8.0 neutral
Appearance	Milky, white, creamy

The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.

# Certificates

- > Prüfbericht Kiwa
- > Certificate of Compliance Polymer Institute
- > BASt surface protection systems (OS-A)
- > Angaben zur Ausführung DIN V 18026





## Possible system products

- > Betofix Fill (1008)
- > BFA\* (0673)
- > Remmers cleaning products

\*Use biocidal products carefully.

Always read the label and product information before use.

# Preparation

#### Substrate requirements

The substrate must be clean, dust-free and dry.

#### Substrate preparation

Any construction defects such as cracks, cracked joints, defective connections, rising damp and hygroscopic moisture must be remedied in advance.

Perform any necessary cleaning gently, e.g. by spraying with cold or warm water or by steam-cleaning; use rotec soft whirl jet technology or Remmers cleaning products (e.g. Traffic Film Remover (0671), Clean FP (0666), Clean AC (0672), Combi WR (0675)) on tough stains.

#### Directions





## Conditions for use

Temperature of the material, air and substrate: from min. +10 °C to max. +25 °C.

Apply the impregnation agent with a suitable tool, working crosswise, or by airless spraying.

#### Tips on use

In order to ensure that the setting of the cement is not disrupted, concrete should be hydrophobised no earlier than two, and ideally four, weeks after production.

The material must not be allowed to come into direct contact with bitumen.

Take appropriate measures to protect adjacent building elements and materials that should not come into contact with the product.

Protect freshly treated surfaces from driving rain, wind, sunlight and condensation.

Remove any excess impregnation agent within 1 hour using V 101 thinner.

## Notes

Deviations from applicable regulations must be agreed separately.

The relevant test certificates must be observed when planning and carrying out work.

Water must not be allowed to penetrate behind the hydrophobized zone.

Carry out a quantitative analysis of aggressive salts if there are any salts present that could damage building materials.

High concentrations of harmful salts can cause major structural damage that impregnation cannot prevent. The level of absorption is crucial for the impregnation agent to work at its best. This depends on the respective pore volume and moisture content of the building material.

Testing effectiveness:

The water absorption of mineral building materials can be determined using the Funcosil Test Tube developed by Professor Karsten (Funcosil Facade Testing Kit, article no. 4954).

Testing can only be carried out at the earliest 6 weeks after application.

## Tools / Cleaning



Long-pile lamb's wool roller, brush.

Airless spraying nozzle: 40° spraying angle, borehole 0.021 inches, max. 60 bar spraying pressure

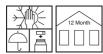
Tools must be clean and dry.

Clean tools with water after use and before any lengthy interruptions to work.

## Remmers tools

- > Funcosil Prüfröhrchen (4928)
- > Funcosil Test-Set (4954)
- > Flächenstreicher (4540)
- > Farbrolle FC (4913)
- > Teleskopstiel (4391)
- Rollerbügel (4449)Pro nylon roller (5045)
- > Nylon Roller Standard (5066)
- > Heizkörperpinsel (4541)

# Storage / Shelf life



If stored unopened in its original container in a cool, dry place and protected against frost, the product will keep for at least 12 months.

Use the contents of open containers as quickly as possible.

# Safety data / Regulations

For further information on the safety aspects of transporting, storing and handling the product and on disposal and environmental matters, please see the current Safety Data Sheet.

Personal protective equipment





	Respiratory protection with a particle filter P2 mu suitable protective gloves and clothing.	ist be worn during spraying, together with protective goggles. Wear		
Disposal	Larger quantities of leftover product should be disposed of in the original containers in accordance with the applicable regulations. Completely empty, clean containers should be recycled. Do not dispose of together with household waste. Do not allow to enter the sewage system. Do not empty into drains.			
Biocidal Products Regulation	Contains a biocidal product (in-can preservative) with the biocidal agents CMIT/MIT (3:1) for protecting the container content from deterioration by microbial organisms (germs, yeast, etc.). Please note the processing guidelines carefully!			
Declaration of performance	> Declaration of performance			
Declaration of conformity	CE CA			
	1119 (CE); 0836 (UKCA)  Remmers GmbH  Bernhard-Remmers-Str. 13, D – 49624 Löningen  UKCA Remmers (UK) Limited  Unit 4, Lloyds Court, Manor Royal Crawley, RH10 9QU			
	CE 08 / UKCA 22 GBI F 008-3 EN 1504-2:2004 0710			
	Surface protection products – Hydrophobic Impregnation			
	Depth of penetration: Water adsorption and resistance to alkali:	Class II: ≥ 10 mm Absorption ratio: < 7.5 % compared with the untreated specimen < 10 % after immersion in alkali solution		

Class I: > 30 %

NPD

the not impregnated specimen

The loss of mass of the surface of the impregnated specimen must occur at least 20 cycles later than that of

Drying rate for hydrophobic impregnation:

Loss of mass after freeze-thaw salt stress:

Dangerous substances:

Please note that the data and information given above have been calculated as guidelines in the laboratory and from real-life experience and are therefore not binding as a basic principle.

This information is therefore of a general nature only and describes our products and how they are used and worked with. In this respect, it must be borne in mind that the varied and diverse nature of the

prevailing working conditions, materials used and construction sites encountered means that not every individual case can be covered. In this respect, we therefore recommend either conducting tests or liaising with us in the event of any doubt. Unless we have provided express written assurance of the products' specific suitability or characteristics in respect of a contractually stipulated intended use, any technical application-related advice or instruction will never

be binding, even though it is provided to the best of our knowledge. In all other respects, our general terms and conditions of sale and delivery shall apply.

When a new version of this Technical Data Sheet is published, it shall replace the previous version.