





## Kiesol

Single-component, solvent-free, strengthening silicification concentrate



Availability				
Quantity per pallet	360	84	50	24
Packaging unit	6 x 1 kg	5 kg	10 kg	30 kg
Type of container	Tin canister	Tin canister	Tin canister	Tin canister
Container code	01	05	10	30
Art. no.				
1810				

## **Application rate**



Subsequent horizontal waterproofing:

Approx. 1.5 kg/m per 10 cm wall thickness (can vary significantly depending on porosity of masonry)

Priming:

Approx. 0.1 - 0.3 kg/m² (dilute 1:1 with water)

Surface improvement:

Approx. 0.2 - 0.4 kg/m<sup>2</sup>

## Range of use



- Porous, mineral building materials such as fired and sand-lime brick, sandstone, mineral renders
- Subsequent horizontal waterproofing of masonry under gravity up to a degree of moisture penetration of 80%
- Subsequent horizontal waterproofing of masonry under low pressure up to a degree of moisture penetration of 95%
- Priming for protection against the effect of water from behind
- Surface improvement

## **Property profile**



- Strengthens
- Narrows pores
- Repels water
- Inhibits masonry salt
- Improves adhesion, abrasion resistance and surface strength
- Increases resistance to chemical attack

# Characteristic data of the product





Density (20 °C)	Approx. 1.15 g/cm <sup>3</sup>
Strengthening	≤ 5 N/mm²
Water repellency	$W < 0.5 \text{ kg/(m}^{2*}h^{0.5})$
Water vapour permeability	> 90%
Appearance/colour	Clear to yellowish
pH value	Approx. 11

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

#### Certificates

- WTA-Prüfbericht M 1072 RWTH Aachen (ibac) Prüfung Kiesol bei DFG 80 % nach WTA Merkblatt4-4-04
- WTA-Zertifikat Kiesol

#### Additional information

- > HISTORISCHE PRÜFZEUGNISSE
- > 1. Prüfzeugnis Bohrlochverfahren
- > 2. Gutachten Institut für Bauphysik Nr. 9724-HG-P-93, Langzeitwirkung: Alte Oper Frankfurt
- > 3. BAM Prüfung der Wirksamkeit zur nachträglichen Mauertrockenlegung
- > 4. Hygiene-Institut Gelsenkirchen Trinkwasserbelange
- > 5. Hygiene-Institut Gelsenkirchen Prüfzeugnis gemäß DVGW-Arbeitsblatt W 347
- 6. Prüfzeugnis Toxikologische Bewertung

## Possible system products

- [innen\_und\_aussenabdichtungssysteme\_1810]
- > PBD 1K (0870)
- > PBD 2K (0886)
- > BIT 1K [basic] (0872)
- > ECO 2K (0871)
- > WP Sulfatex (0430)
- > Dichtschlämme (0405)
- > WP DS Level (0426)
- > WP Sulfatex rapid (0429)
- > WP DKS [basic] (0423)
- > WP Top [basic] (0428)
- > BSP 3 (0312)

### **Preparation**

## Substrate requirements

#### Subsequent horizontal waterproofing of masonry

Drilling channel must be free of drill dust.

### Priming for protection against the effect of water from behind

The substrate must be clean and free of oil, grease and release agents.

### Surface improvement

The substrate must be clean and free of oil, grease and release agents.

#### Substrate preparation

For injection in a low-pressure procedure, the wall surface must be plugged with Kiesol and waterproofing grout to at least 30 cm above and below the row of boreholes.

## Subsequent horizontal waterproofing of masonry

Production of boreholes: Single row, diameter 12 - 30 mm, spacing 10 - 12.5 cm, angle of inclination approx. 45°, borehole depth up to approx. 5 cm from end of wall. [U2\_HZ\_11]





Pre-inject borehole suspension into hollow masonry.

Wait 7 days before carrying out further work.

Re-drill filled boreholes.

For injection under pressure, plug the masonry surface with Kiesol and waterproofing grout to a width of 50 cm in the region of the series of boreholes.

#### Directions





#### Conditions for use

Temperature of the material, air and substrate: from min. +5 °C to max. +35 °C

### Subsequent horizontal waterproofing of masonry

- Under gravity (moisture penetration < 80%):

Using a suitable vessel, e.g. Kiesol Metering Cartridge (417301), fill (multiple times if necessary) until saturated.

 Low pressure (moisture penetration < 95%):</li> Inject using suitable injection equipment and injection packers.

### Priming for protection against the effect of water from behind

Apply the material in sections, under gravity and without misting in the flow coating procedure, horizontally from top to bottom.

### Surface improvement

Apply the material in sections, under gravity and without misting in the flow coating procedure, horizontally from top to bottom.

Repeat the procedure (wet-on-wet) until no more material uptake is observed.

## Tips on use

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

#### Subsequent horizontal waterproofing of masonry

After injection, fill the boreholes with borehole suspension.

Then, apply surface waterproofing to at least 30 cm above and below the row of boreholes. Include adjacent components if necessary.

## Priming for protection against the effect of water from behind

Immediately remove the product in excess.

Perform subsequent operations wet-on-wet, within the reaction time.

#### Surface improvement

Protect freshly treated surfaces from driving rain, wind, sunlight and condensation. Not suitable for use as a horizontal impervious layer for porous concrete and loam building materials

#### Notes

Not suitable for improving surfaces where higher requirements are placed on appearance. The relevant test certificates must be observed when planning and carrying out work. The applicable regulations and legal requirements must be observed. [H\_M\_30]

#### Tools / Cleaning



Brush, surface sprayer, airless spraying equipment, pouring vessel, low-pressure injection apparatus

Additional equipment according to tool programme

Clean tools immediately after use with water.

Ensure that any residue from cleaning is disposed of correctly.





#### Remmers tools

- Druckschlauch mit Greifkopf (4371)
- > Lamellenschlagpacker (4524)
- > Setzwerkzeug (4523)
- **4538 (4538)**
- **4535 (4535)**
- Kiesol Dosierkartusche (4173)
- Kiesol Fülleinrichtung -Set- (4174)
- Greifkopf (4037)
- > Gloria Hochleistungssprühgerät 410 / 405 T Profiline (4667)
- > Gloria Drucksprüher Pro 100 (4668)
- Flächenstreicher (4540)
- > Heizkörperpinsel (4541)

#### Storage / Shelf life





At least 36 months in unopened, original containers stored cool, dry and protected from frost.

#### 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 must be worn during spraying, together with protective goggles. Wear suitable protective gloves and clothing.

#### 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.

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

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