

TECHNICAL DATA SHEET

SINNODUR WATERPROOFING SILICATE

One-component rigid waterproofing - a 3mm layer can resist pressure of up to 1 bar

Highly resistant to acids and alkalis

Product description and advantages

Sinnodur Waterproofing Silicate is a high quality one-component rigid waterproofing based on a new silicate binder system with environmentally friendly raw materials. It is waterproof up to 5 bar and has high resistance against acids, alkalis and solvents.

Sinnodur Waterproofing Silicate binds tightly to cementitious substrates such as concrete and screed, even the surface is very smooth.

The main features are:

- *Highly resistant to acids, alkalis & solvents*
- *Sulfate resistant according to DIN 4030*
- *Pressure water impermeable (5 bar)*
- *Extremely high adhesion to mineral-based substrates*
- *High surface hardness, high mechanical & abrasion resistance*
- *No efflorescence & no damage to concrete or masonry*
- *Solidifies soft or less solid surfaces*

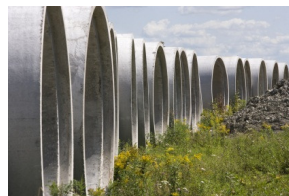
Range of usage

Sinnodur Waterproofing Silicate protects mineral or cement based surfaces such as concrete, screed and bricks against abrasion and aggressive media.

Sinnodur Waterproofing Silicate can be used in following areas:

- *Agriculture*
- *Acid-proof installations*
- *Laboratories*
- *Pipelines*

- *Sewage treatment plants*



- *Sewers*
- *Biogas tanks*
- *Chimneys*
- *Fireproof areas*
- *All areas that are exposed to acids*

Sinnodur Waterproofing Silicate works as waterproofing for underground areas against moisture and leachates as well as pressure water. This product can typically be used as surface protection against abrasion, acids and chemicals in industrial areas, pipelines, sewage treatment plants, etc.

Waterproofing applications depend on water pressure, surface quality and location. Please evaluate these circumstances before commencing work.

Characteristic data

28-days-values

Basement	Silicate
VOC	Free
Colour	Grey
Application tools	Trowel, brush
Layers	2 or 3
Working time	30 min/ 15 min (Fix)
Saltwater resistance	After 7 days
Chemical resistance	After 7 days

Technical Data

Mixing ratio	0,85 to 1,0 water to 5kg powder. 17 to 20% The addition of water ratio has to be kept consistent to avoid color fluctuation.
Bulk density of powder	Approx. 1,3 g/cm ³
Fresh mortar density	Approx. 2,0 g/cm ³
Consumption	Approx. 2,0 kg/m ² and mm application thickness (powder material)
Application thickness	1 - 3 mm
Air and surface temperature	Min. 8° C, max. 35° C The floor temperature must be min. 3° C above the dew point.
Load capacity:	Curing at 20° C
Walk able after	Approx. 1 day
Light load:	1 day
Full load:	7 days
Consistency	For brushing/ grouting

Preparation of substrate

All wall or floor substrates must be sound, capable of load-bearing and free from loose or soft materials and substances. Suitable substrates are concrete, masonry work and Class P III render. When there are partially leaking areas in the masonry work, e.g. soft joints, floor connection joints or horizontal joints with a barrier membrane, chisel out open cracks at least 2 cm deep and repair with filling material before protecting the surface with **Sinnodur Primer / Sinnodur Quick-Primer / Sinnodur Silikatprimer**. No preparation is needed on light absorbent surfaces like concrete or bricks.

Mixing and application

Pour 0,85 - 1,0 liters of water into a clean container followed by 5 kg **Sinnodur Waterproofing Silicate**. Use an electric drill with attached stirrer to mix until lump-free. Apply after 2-4 minutes. Mix **Sinnodur Waterproofing Silicate** only with water. Apply **Sinnodur Waterproofing Silicate** in the required thickness using the filling method, or use a soft brush to cover the surface with the grouting method. The applied quantity should be approximately 2 kg/m². It is recommended that the first layer be "rubbed in" with a brush for better adhesion.

The subsequent layers may be levelled out with a flat ladle. Apply a minimum of 2 layers. When dealing with pressure water or if waterproofing water reservoirs, 3 layers are needed. Each layer must have the minimum thickness across all points. The maximum thickness per layer is 4 mm.

After treatment

After application area has to be protected against direct solar radiation and frost for 2 more days.

Protection

Slabs, tiles and gypsum mortar may be used after **Sinnodur Waterproofing Silicate** has sufficiently cured.

Packaging, Shelf Life

Packaging: 3 x 5 kg plastic bags in a plastic bucket.

Shelf Life: 6 months

Cleaning

All equipment should be directly washed clean and dried before and after application.

Safety, Ecology, Disposal

Please protect skin and eyes during use. Rinse thoroughly with water if there is any irritation and consult a doctor in case of eye contact. Please refer to the Material Safety Data Sheets that are available on info@sinnotec.eu for further information on safety during transportation, storage, handling and disposal.

Notes

Do not use temperatures below +8° C or apply to frozen substrates. Use only on solid areas for sealing against pressure water. Check the surface thoroughly for unapplied spots and protect for at least 24 hours after application from weather (rain, frost). **Sinnodur Waterproofing Silicate** becomes permanent only after 4-day water load (earliest). Always consider the specifications and site conditions before applying. Use structural provisions such as expansion joints to avoid cracks in the building. Sealing of joints has to be done with flexible or permanently

elastic sealing materials. Waterproofing should be aligned to face the water (positive loading).

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