

## Technical data sheet

# SINNODUR Protective

High quality, extremely acid resistant protection for all mineralic and metall surfaces

**Certificate 50271-08 following DIN EN 12390-8:2000 „water penetration“ and DIN EN 1015-1:2000 „tear resistance“**

### Product description and advantages

**Sinnodur Protective** is a one-component inorganic mortar, based on a new binder system with environment friendly raw materials. It has unique and innovative properties. It is suitable for perfect protection from acid and abrasion with a dry film thickness of 0,5 to 2 mm of all concrete, cement based indoor and outdoor areas, steel and pipelines, EPS and masonry.

**Sinnodur Protective** is a high quality silicate based waterproofing product.

**Sinnodur Protective** has the following outstanding properties and benefits:

- *Extremely high resistance to diluted and concentrated acids*
- *Test certificate of chemical resistance according to DIN EN 12808.*
- *Using alternative environmentally friendly raw materials for higher performance than epoxy*
- *Non hazardous material and no allergy potential*
- *No dangerous ingredients*
- *Use on horizontal and vertical surfaces*
- *Fire-resistant*
- *Easy and fast application*
- *5 bar pressure water impermeability*
- *Water vapor permeable*
- *Crack and shrinkage free curing*
- *Load bearing membranes*
- *Solvent free, VOC-free, odorless*

- *High mechanical load with high abrasion resistance*
- *Extreme high adhesion to nearly all substrates due to liquid binder penetrating into the substrate.*



### Range of application

**Sinnodur Protective** for protecting all substrates, such as concrete, steel, pipelines, EPS, masonry, cement render, etc.

Ideally suitable for the following applications:

- acid-proof installations
- laboratories
- sewage treatment plants
- sewers
- bio(natural)-gas tanks
- all areas with acid load
- all mineral wall and floor surfaces
- general applications that need, weather, chemical and corrosion protection
- corrosion protection on steel surfaces

## SINNODUR Protective

### Characteristic data

Basis	silicate
Solventwater	
Colour	grey
Consistency	powder
Application	brush, trowel, etc.
Required layers	2
Dry residue	100%

### Technical data

Mixing ratio	100 parts powder : 16 parts water, 5kg bag with max. 0,9 liter Wasser
Compressive strength	19 N/mm <sup>2</sup>
Flexural strength 28d	5,7 N/mm <sup>2</sup>
Dry density	1,3kg/cm <sup>3</sup>
Mortar density	2kg/cm <sup>3</sup>
Consumption for 1mm	2kg/m <sup>2</sup>
Thickness	0,5-1,5 mm
Air- and ambient- temperatur	min. +5°C, max. +35°C
Drying at 20°C	walkable 1 day full load 7d

### Preparation of the substrate

All substrates must be sound, load-bearing and free of loose or soft material and old coatings.

Suitable substrates:

concrete, steel, masonry work and render.  
Partial renovation areas in the masonry work, e.g. floor connection cracks, horizontal joints with a barrier membrane, open cracks at least 2 cm deep, protect and waterproof first with **Sinnodur Mortar** or **Sinnodur Flexible**.

### Mixing and application

Pour 0,8 litres of water into a clean container and then add 5 kg **Sinnodur Protective** powder. Mix with mixing equipment for approx. 1 minute until homogeneous mixture. Allow to 4 minutes maturing time and then stir again until the low viscosity has been achieved. If necessary, water may be

added (only up to the maximum quantity specified) to adjust consistence.

After **Sinnodur Protective** has been mixed apply it in the corresponding layer thickness (0,5 to 1 mm) by trowel thinn or with a soft brush.

Apply thin layers!

Application with brush or trowel possible.  
Levelling: uneven areas such as cracks chased out soft joint areas and gravel pockets should be levelled.

Coarse surface textures should be levelled before applying **Sinnodur Mortar**.

The minimum coverage is about 1 kg/m<sup>2</sup> for 0,5 mm thickness. The total thickness of the layer of mortar should not exceed 2 mm at any one place.

Dry the surface for minimum 7 days before loading permanently under water or with chemicals.

### Tools, cleaning

Your trowel and other equipment can be cleaned with water right after application.

### Delivery and package

#### Packaging:

3 x 5 kg in plastic bags

#### Application rate:

1, 9 kg **Sinnodur Protective** powder per mm thickness per m<sup>2</sup>

#### Shelf-life:

12 months stored dry in closed bags.

### Safety, ecology and disposal

Hazard labelling is not mandatory for Sinnodur Protective. Further information for safety on transporting, storing and handling as well as on disposal and ecology is found in the Safety Data Sheet.

### Notes

*Do not use at temperatures below +5 °C and not for frozen substrates.*

After the coating has been applied, check for missing places and protect for at least 7 days

## **SINNODUR Protective**

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from weather (rain) further on for 2 days  
against sun and frost

With coating materials some minor colour differences are inevitable due to different production batches. This should be taken into account while performing work. If a uniform colour is desired, it is necessary to work on designated sections with the same batch (see label). Basically, it should be noted that this coating is a mineral/inorganic product which do not have a constant colour.

The correct and hence successful application of our products is not within our control. A guarantee can therefore only be given for the quality of our products. This data sheet supersedes all earlier technical data on this product. Information supplied by our employees and/or distributors going beyond the information contained in this data sheet must be confirmed in writing. We reserve the right to make changes representing technical progress.