

PRODUCT DATA SHEET

SikaGrout[®]-310 HK

Multi Purpose Non-Shrink (Shrinkage Compensated) Fibre Reinforced Cementitious Grout

DESCRIPTION

SikaGrout[®]-310HK is a non-shrink (shrinkage compensated) fibre reinforced cementitious grout.

USES

- Machine foundations
- Columns in precast construction
- Concrete anchors
- Bridge bearings
- Cavities
- Gaps
- Floor smoothing
- Rail beds

CHARACTERISTICS / ADVANTAGES

SikaGrout[®]-310 HK is an economical and easy to use material requiring the simple addition of water. Other beneficial properties are:

- Polymer Fibre reinforced to mitigate cracking
- Easy to mix and apply
- Good flow characteristics
- Rapid strength development
- High ultimate strengths
- Impact resistant
- Non-corrosive
- Non-metallic and chloride free
- Shrinkage compensation ability

PRODUCT INFORMATION

Chemical Base	Cement based powder
Packaging	25 kg bag
Appearance / Colour	Grey powder
Shelf Life	9 months from the date of production
Storage Conditions	Stored properly in undamaged and unopened original sealed packaging in cool dry conditions. Protect from direct sunlight and frost.
Bulk Density	1.62 Kg/L

TECHNICAL INFORMATION

Compressive Strength	> 20 MPa @ 1 day (Flow consistency) > 40 MPa @ 7 days (Flow consistency) > 60 MPa @ 28 days (Flow consistency)
Tensile Strength in Flexure	~ 6 MPa @ 1 day (Flow consistency) ~ 8 MPa @ 7days (Flow consistency) ~ 9 MPa @ 28 days (Flow consistency)

Shrinkage

< 1.0 mm/m @ 28 days (Flow consistency)

No cracks @ 28 days by Coutinho Ring Test (Flow consistency)

APPLICATION INFORMATION

Mixing Ratio

Approx. 5 litre water per 25 kg bag (flow consistency)

	Flowable	Pourable	Trowelable
Water Content /bag	~5.0 litre	~4.0 litre	~3.3 litre
Volume	13.8 litre	13.1 litre	12.5 litre
Coverage (bags/m ³)	72	77	80

Layer Thickness

Maximum thickness per pour is 100 mm and minimum is 10 mm.
Maximum thickness per pour with 10mm aggregates is 500mm.

Flowability

~30 s (Flow Cone Time)
~150 mm (Flow Ring)
>300 mm (Flow Table)

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete surface should be clean, sound and free from oil, grease, laitance and loosely adhering particles. Metals surfaces (iron and steel) should be free from scale, rust, oil and grease. All absorbent surfaces must be well saturated with clean water, but be free of any surface water or puddles prior to the application of SikaGrout®-310 HK.

MIXING

Place 70-80% of the premeasured clean water (depending on consistency required - refer to 'Mix Ratio') into a clean container and gradually add the whole bag of SikaGrout®-310 HK into it while continuously mixing. Add the remaining water until the desired consistency is obtained. Mix for 2-3 minutes with a low speed drill (maximum 500 rpm) until the mixture become homogenous. Hold the fresh mortar in the container for 1-2 minutes, and then mix again for 1-2 minutes.

APPLICATION

After mixing, stir lightly with a spatula for a few seconds to release any entrapped air. The grout is then poured immediately into the prepared formwork. When carrying out base plate grouting, ensure sufficient pressure head is maintained for uninterrupted mortar flow. For formwork repair, the prepared formwork must be firmly in place and kept watertight. When placing grout over a large area, it is important to maintain a continuous flow throughout. Work sequence must be properly organized to ensure an uninterrupted flow. For sections thicker than 100 mm or for large grouting areas, it is necessary to mix SikaGrout®-310 HK with graded 10 mm silt free aggregates to minimize temperature rise generated during curing stage. The quantity of aggregates should not exceed 1 part aggregates to 1 part SikaGrout®-310 HK by weight.

Other precautions such as the use of chilled water, insulation of the formwork or baseplate may be required. Please consult Technical Service Department for assistance. To further ensure that air entrapped during mixing is allowed to fully escape, it may be necessary to make breather holes. Use steel rods or chains to assist the flow of grout where necessary.

CLEANING OF TOOLS

Clean all tools and equipment with water immediately after use. Hardened mortar can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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Product Data Sheet

SikaGrout®-310 HK
August 2021, Version 03.01
020201010010000363

SikaGrout-310HK-en-HK-(08-2021)-3-1.pdf