

# PRODUCT DATA SHEET

## Sika® Grout 100 (G)

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High strength, Non-shrink, None oxidized Cementitious Grout for Glass & Aluminum

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### PRODUCT DESCRIPTION

Sikagrout® 100 (G) is a ready to use non-shrinkage cement-based grout containing: Blended high performance cements and fillers. Selected oven dried quartz aggregates. Shrinkage compensating powders, when mixed with water produces a fluid grey colored grout (similar to concrete colour).

#### USES

Sikagrout® 100 (G) is used in the following applications::

- Grouting for "U Channels" for glass and aluminum production starting thickness of 3mm from each side.
- Grouting of steel column base plates.
- General anchor bolt and dowel fixation.
- Grouting for pre-fabricated elements, pre-stressed concretes.
- Grouting of general industrial equipment.

#### CHARACTERISTICS / ADVANTAGES

- Sikagrout® 100 (G) pourable mortars are economical and easy to use material.
- Contains no metal particles, consequently it does not oxidize in high humidity.
- Chloride free, with its high alkaline pH. It will protect metals from corrosion.
- It has good ultimate strength both in flow-able and plastic grade.
- It has excellent flexural, resistance.
- It adheres to concrete, mortars, stone, steel, iron, aluminum, glass, etc...
- It may be pumped, injected, vibrated or compacted. Stable in high humidity and temperature variations.
- Resistant to water and oil penetration.
- Rapid strength development reduces down time requirements for fast track projects.

#### COMPLIANCE

Sikagrout® -100 (G) complies to the outline of ASTM-C-1107 Grade A, for a single stage Non-shrink expansion grout and CRD-C-621 expansion percent E.N. standards and DIN standards for compressive and flexural strengths.

## PRODUCT DATA

### FORM

### COLOR

Grey powder

### PACKAGING

25 Kg bags

### STORAGE

### STORAGE CONDITIONS / SHELF-LIFE

12 months if stored properly in original unopened packaging in cool and dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight. Protect from humidity. Protect from Frost.

### TECHNICAL DATA

### DENSITY

2.0 – 2.1

### COMPRESSIVE STRENGTH (EN 196 – 1 DIN 1164/7)

	Flow-able Grade	Plastic Grade
1 day	N/A	N/A
3 days	17 N/mm <sup>2</sup>	20 N/mm <sup>2</sup>
7 days	23 N/mm <sup>2</sup>	26 N/mm <sup>2</sup>
28 days	30 N/mm <sup>2</sup>	35 N/mm <sup>2</sup>

### FLEXURAL STRENGTH (ASTM C348)

	Flow-able Grade	Plastic Grade
28 days	6.8 N/mm <sup>2</sup>	7.5 N/mm <sup>2</sup>

### SETTING TIME (ASTM C191)

	Flow-able Grade	Plastic Grade
Initial Setting	300 min	350 min
Final Setting	405 min	390 min

### WORKABILITY GRADE

	Flow-able Grade	Plastic Grade
Minimum per bag	3.75 L	3.2 L
Maximum per bag	4.5 L	3.7 L

## System Information

### APPLICATION DETAILS

### APPLICATION DATA

Minimum application temperature + 5°C.

The substrate should be properly prepared and free of all loose particles, oils and grease. Chipping and or whip sand blasting is preferred.

Concrete substrates should be pre-soaked with water from 12 hours prior to Sikagrout® 100 (G) applications (surface saturated dry condition) especially in Hot Weather Application. After placement of Sikagrout® 100 (G), exposed surface area's to be fully cured for a minimum period of 3 days from achieving its initial setting; Or directly bleeding water have evaporated. Sika Antisol® - E curing compound may also be used to ensure ultimate curing.

For anchoring dowels and bolts the minimum annular space around the shaft is three times, the diameter of the largest grains in the mortar mix.

## MIXING PROCEDURE

The mixing should be mechanically. Pour 2/3 of the gauging water into the mixing pail. Gradually adding Sikagrout® 100 (G), continue mixing until lump free and smooth consistency is achieved, add the balance of the gauging water, mixing for a further 2 to 3 minutes. Recommended to use either low speed (max. 500 rpm) electric drill with a basket type mixing paddle or forced action – or stand type mixers.

## PRECAUTIONS

Sikagrout® 100 (G) is always added to the pre-measured gauging water. Volume of water must always be within the limits as stated in our Technical Data Sheet. Excess water, will cause cracks, segregation and low grout strengths. Hand mixing of Sikagrout® 100 (G) is not recommended. Sikagrout® 100 (G) should be left to stand after final mixing, for 3-5 minutes, allowing any entrapped air to dispel. To take full advantage of Sikagrout® 100 (G) expansion properties. Sikagrout® 100 (G) should be poured /placed as soon as possible from 5 minutes standing, up to 30 minutes from mixing.

## CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

## VALUE BASE

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.

## 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.

## HEALTH AND SAFETY INFORMATION

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 containing physical, ecological, toxicological and other safety-related data.

Wear gloves, coveralls and goggles during handling. Sikagrout® 100 (G) contains cements of high alkalinity which could affect people with sensitive skin. Always wash your hands with soap and water after use.

Non-hazardous transportation. Non-Toxic when fully cured.

## 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 practice, the differences in materials, substratum 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request

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