

#### **BUILDING TRUST**

## PRODUCT DATA SHEET

# SikaGrout®-200

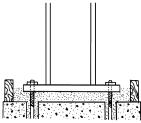
## Non-contraction mortar for precision anchors and fillings

## **DESCRIPTION**

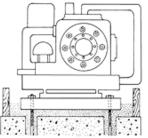
SikaGrout®-200 is a non-shrinking mortar, ready to use in anchor fillings and leveling works. SikaGrout®-200 has been specially designed to obtain the proper consistency and penetration for each type of application, maintains its vertical volumetric stability, develops resistance quickly and reaches high final resistances. SikaGrout®-200 is especially recommended when plastic or semi-fluid consistency is required and when a more rapid development of mechanical properties is required.

## **USES**

SikaGrout®-200 mortar is used as a filler in confined areas, when required: high strength, adhesion and vertical volumetric stability of the filler.
Use especially for:



Filling and anchoring steel columns or prefabricated concrete



Filling and anchoring of equipment subjected to dynamic loads

#### **Anchor bolts**

- Filling under steel columns or prefabricated concrete.
- Structural mortar pumping.
- Leveling of equipment and machinery in the industry (engines, turbines, compressors, pumps ...)
- Repair of defects in concrete.
- Elaboration of concrete without contraction for structural fillings.

## **CHARACTERISTICS / ADVANTAGES**

SikaGrout®-200 has the following benefits:

- Easy to use. Just add the required water and knead until a homogeneous mixture is obtained.
- High workability according to the type of application and the needs of the work.
- With the SikaGrout®-200 you get very high mechanical resistance at all ages.
- Quick operation of machines due to the accelerated gain of resistance.
- With the SikaGrout®-200 the volume change of the cement is controlled when hydrating, which guarantees the stability of the filling an adequate and uniform transmission of stress to the base.
- The SikaGrout®-200 mortar contains no metallic aggregates that are susceptible to oxidation.
- Does not contain chlorides.

#### PRODUCT INFORMATION

Packaging	30 kg bag
Shelf Life	6 months from its date of production
Storage Conditions	Store in its original packaging properly closed on stowage and under roof, protected from moisture. Take normal precautions for the transport of chemicals.

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Density of the mixture: 2.12 kg/l
Apparent density of dust: 2.8 kg/l

#### **TECHNICAL INFORMATION**

Compressive Strength	SikaGrout®-200	Plastic Consist- ency (MPa)	Semi Fluid Con- sistency (MPa)	Fluid Consistency (MPa)
	1 day	38	35	-
	7 days	58	53	-
	28 days	70	58	-
	Setting time: 7–10 hours, for both products *  * Depending on the consistency of the mortar and the temperature of the site this time may vary.			

## APPLICATION INFORMATION

Consumption	For a litre of filling (not including waste) the following amount of SikaGrout®-200 powder is required: for a semi-fluid consistency. SikaGrout®-200: 2.02 kg
Pot Life	30 min at 20 °C for all consistencies

## **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.

#### **IMPORTANT CONSIDERATIONS**

- Thickness to use SikaGrout®-200 without gravel: maximum thickness = 5 cm, minimum thickness = 1 cm
- In hot climates we recommend using cold water to prepare the mixture, as well as storage of SikaGrout®-200 in the shade, saturation of the base with cold water and protection of the application against premature drying.
- A dry concrete substrate as well as absorbent formwork can cause grout shrinkage by absorption of kneading water.
- It is recommended to prime the concrete surface with the Sikadur®-32 Primer on the wide perimeter envelope of the unconfined grout and under the ends of the metal plate. If necessary, place anchorages.
- When preparing the product, use the minimum amount of water necessary that guarantees a good placement, not exceeding the recommended one.
- Grout should be placed continuously to avoid catching air under the deck to level.
- In large fills, the induction of joints must be considered to reduce the risk of cracking.
- Some baseplate designs require ventilation holes in the plate to eliminate air pockets and control the development of the application.
- Vibratory machinery adjacent to the application area of the SikaGrout®-200 must be put out of operation until the grout has set, as it may lead to bleeding of the material.
- On machines or equipment that produce very strong

- vibrations, the Sikadur®-42 HS is recommended for filling and leveling.
- Greater water consumption requires less amount of product.

#### **Special Note:**

When the areas or volumes of SikaGrout®-200 to be placed are very large and when the conditions of application are special, consult the Technical Department of Sika.

It should be taken into account when calculating consumption, 5–7 % of waste of the product.

## **ECOLOGY, HEALTH AND SAFETY**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## **APPLICATION INSTRUCTIONS**

## SUBSTRATE QUALITY / PRE-TREATMENT

## **Surface Preparation**

The concrete surface must be adapted for the placement of the grout on it. It must be roughened mechanically to ensure adhesion and must be clean, healthy and free of loose or poorly adhered parts. The surface grout of the concrete must be removed together with residues of curative membranes that prevent adhesion. It is vitally important to saturate (avoiding settling) the concrete surface on which the grout will rest so as to avoid sealing leading to the shrinkage of the filling material. Bolt holes must be rough and free of water before refilling. When placing SikaGrout®-200 in contact with metallic surfaces, it must be guaranteed that they are free of dust, grease, rust, oil or defective



#### paints.

#### **Formwork**

To pour the SikaGrout®-200, a form with non-absorbent, leak-free material must be made. At the pouring site of the SikaGrout®-200, the form must be spaced between 7 and 10 cm from the leveling element. In other places the form must be separated by a distance equal to the thickness of the filling but not less than 2.5 cm. The height of the form at the discharge sites must be greater to provide a pressure head to ensure the flow of the SikaGrout®-200 under the leveling plate or equipment.

Consideration should be given to the use of a movable pouring funnel to place the SikaGrout®-200 from different locations.

When the filling width is very large (greater than 100 mm), consider using a funnel with a hose to give it a larger head, the hose will remain full during emptying to ensure that there is sufficient pressure and that the material flows continually.

#### **MIXING**

The SikaGrout®-200 should be mixed with water in the proportions suitable for the required consistency, according to the following table: (litres of water per package of 30 kg of product).

SikaGrout: Consistency water requirement (L):

Product	Plastic Con- sistency	Semi Fluid Consistency	Fluid Con- sistency
SikaGrout®-	3.5-3.8	3.9-4.2	See note
200			

Note: If high initial strengths and fluid consistency are required, it is recommended to use SikaGrout®-200 with addition of Sikament® NN between 0.2 and 0.3 % of the weight of SikaGrout®-200 subject to trial mix at site. Excessive addition of water to the end achieving fluidity causes grout segregation and causes setting delays.

The exact amount of water must be previously determined by testing the conditions of the work.

#### Mixing procedure

Pour in the mixer all the intended kneading water and gradually add the SikaGrout®-200, mix until obtaining a homogeneous mass free of lumps. Use mechanical mixers or use a low speed drill with a mixing blade. Be careful not to introduce excess air during product mixing.

#### **APPLICATION**

#### **Recommended Consistency**

For the filling and leveling of small plates, as under metal columns, a plastic consistency is considered adequate.

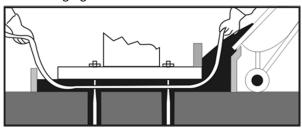
When areas to fill and level are larger, such as under

medium equipment, a semi-fluid consistency is recommended.

For other applications you can look for the required consistency without exceeding the previously established water content.

#### Placing the product

Pour the SikaGrout®-200 mixture continuously until the product appears on the opposite side. Metal bands, chains or steel cables may be used to aid or give mobility. Do not vibrate grout with high fluidity, as it can segregate it.



The mixture should be placed continuously and in the shortest possible time after mixing, as according to the weather conditions there may be loss of fluidity if there are delays in the placement.

Make sure you have enough mix required for the application. The grout must be placed at least 6 mm above the lower surface of the platen or element to be filled, guaranteeing a complete filling. Perforations for bolt anchoring must be pre-filled to the placement of the rest of the leveling grout of the element.

#### **Concrete with SikaGrout 200**

For fillings between 5 and 12 cm thick, it is recommended to add clean, high density, healthy and saturated gravel, with a size between 5 and 12 mm to a maximum of 40 % of the weight of SikaGrout®-200. For larger thicknesses, clean, healthy, saturated and well graded gravel with a maximum size of 25 mm and not exceeding 50 % of the weight of the SikaGrout®-200 must be added. For specific low-retraction fluids in repair and reinforcement work The use of Sika® Concrete RE 5000 is recommended.

### **CURING TREATMENT**

Immediately fill up, cover exposed areas to avoid evaporation of kneading water, soak with water for at least 7 days and / or cure with Sika® Antisol®.

#### 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.

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