

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# SikaGrout<sup>®</sup>-114 SA

## CEMENTITIOUS, SHRINKAGE COMPENSATED, GENERAL PURPOSE GROUT

## DESCRIPTION

SikaGrout<sup>®</sup>-114 SA is a cementitious, free flowing, economical, general purpose, non-shrink precision grout with high ultimate strength.

Suitable for use in hot and tropical climatic conditions

## USES

SikaGrout<sup>®</sup>-114 SA is used for grouting in the follow-ing:

- Machine foundations
- Columns in pre-cast construction
- Concrete anchors, cavities, gaps and recesses
- Base plates
- General concrete repairs
- Bridge bearing pads

## **PRODUCT INFORMATION**

## **CHARACTERISTICS / ADVANTAGES**

SikaGrout<sup>®</sup>-114 SA is easy to use grout requiring only the addition of water. It offers the following beneficial properties:

- Easy to mix
- Good flow characteristics
- Adjustable consistency
- High final strengths
- Non-corrosive and iron-free

## **APPROVALS / CERTIFICATES**

Follows the CRD-C621-83-10.2 and ASTM C1107 as Type C

| Tensile adhesion strength |  | concrete failu  | ·          |            | (BS 1881)   |  |
|---------------------------|--|---|------------|------------|-------------|--|
|                           | w/p ratio =<br>0.13 ( 3.25 L<br>water /<br>25kg)   | ≥ 30 N/mm <sup>2</sup>  | ≥ 45 N/mm² | ≥ 65 N/mm² |             |  |
| Compressive strength      |  | 1 Day   | 7 Day      | 28 Day     | (ASTM C109) |  |
| Maximum grain size        | Max. 4 mm  | Max. 4 mm   |            |            |             |  |
| Storage conditions        | Store in original unopened packaging in cool and dry condition between 5<br>°C and 35 °C. Protect from direct sunlight, heat and moisture. |   |            |            |             |  |
| Shelf life                | 12 months n  | 12 months minimum from date of production                           |            |            |             |  |
| Appearance / Colour       | Grey Powder  |   |            |            |             |  |
| Packaging                 | 25 kg bag  | 25 kg bag   |            |            |             |  |
| Composition               | Portland cen   | Portland cement, selected fillers and aggregates, special additives |            |            |             |  |

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# **APPLICATION INFORMATION**

| Consistency                                      | Water per 25 kg bag   | water / powder ratio   |  |  |
|--|---|--|--|--|
| Flowable   | 3.25 – 3.5 L  | 0.13 - 0.14  |  |  |
| ~2.4 kg/l (25 °C)                                |   |  |  |  |
| ~11.7 L / 25 kg bag, depending on water addition |   |  |  |  |
| Min. 10 mm per pour<br>Max. 100 mm per pour      |   |  |  |  |
| +5 °C min. / +35 °C max.                         |   |  |  |  |
| +5 °C min. / +35 °C max.                         |   |  |  |  |
| ~4 h (23 °C)                                     |   |  |  |  |
|  | Flowable<br>~2.4 kg/l (25 °C)<br>~11.7 L / 25 kg bag<br>Min. 10 mm per po<br>Max. 100 mm per po<br>+5 °C min. / +35 °C<br>+5 °C min. / +35 °C | Flowable       3.25 - 3.5 L         ~2.4 kg/l (25 °C)       ~11.7 L / 25 kg bag, depending on water additio         Min. 10 mm per pour       Max. 100 mm per pour         +5 °C min. / +35 °C max.       +5 °C min. / +35 °C max. |  |  |

## **BASIS OF PRODUCT DATA**

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

# IMPORTANT CONSIDERATIONS

- Ensure formwork is secure and watertight to prevent movement and leaking during placing and curing.
- Where maximum thickness exceeds 100 mm, consider the use of Sikacrete\*-114 SA.
- At high temperatures, use chilled water for mixing to keep grout mix temperature below 30 °C.
- In hot weather, base plates and foundations must be shaded from direct sunlight.
- Condition bags < 30 °C prior to use.</li>
- SikaRep<sup>®</sup> SA thixotropic fine mortars can be used to fix shims and alignment plates before grouting.
- Depending on requirements and site condition, the addition of single size, clean coarse aggregates is possible up to 100 % by weight of the dry grout powder. Trials are recommended to confirm suitability of aggregates to be employed.
- For additional information on SikaGrout<sup>®</sup>-114 SA or other grouting materials contact Sika Technical Department.

# ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets before using any products. For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

# **APPLICATION INSTRUCTIONS**

### SUBSTRATE QUALITY / PRE-TREATMENT

Concrete surfaces should be clean, sound, rough and free from oil, grease, cement laitance and all loosely adhering particles.

Absorbent surfaces should be saturated thoroughly with clean water. Metal surfaces (iron and steel)

Product Data Sheet SikaGrout®-114 SA December 2020, Version 02.01 020201010010000253 should be free from scale, rust, oil and grease.

#### BONDING AGENT AND STEEL PROTECTION

Embedded steel reinforcing should be free from scale, rust, oil and grease, and treated with a suitable anticorrosion coating such as SikaTop<sup>®</sup> Armatec<sup>®</sup>-110 Epo-Cem<sup>®</sup>.

The application of a suitable bonding agent such as Sikadur®-32 LP or SikaTop® Armatec®-110 EpoCem® will improve adhesion on large areas or where particularly dense concrete substrates are involved.

#### MIXING

Add water according to the desired consistency into a clean mixing vessel before slowly adding the SikaGrout®-114 SA powder. SikaGrout®-114 SA is best mixed in a forced action mixer, for 2 to 3 minutes or until the mix is free of lumps, not longer than 5 minutes. Slow speed drill (maximum 500 rpm) can be also used for mixing. Normal tumble type concrete mixers are not suitable. Do not mix more grout than can be placed within 15 to 20 minutes. Do not add extra water or other ingredients. Mix only full bags for best results.

#### APPLICATION

Before pouring let the mixed grout stand for approximately 5 minutes after mixing to allow entrapped air to escape. Pour into the prepared area such that the grout has the shortest distance to travel. Ensure that air displaced by the grout is allowed to escape. When carrying out base plate grouting, ensure a sufficient head of pressure is maintained to keep the mortar flowing. All exposed areas of the mortar surface should be kept as small as possible.



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#### **CURING TREATMENT**

Treat exposed surfaces with Antisol®-WB curing compounds or use other approved curing methods such as polyethylene sheeting or wet hessian. Do not commence fogging until final set has been reached.

### **CLEANING OF EQUIPMENT**

Clean equipment and mixer immediately after application with water. Hardened material can only be removed mechanically.

# LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

# 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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 All products are supplie under a management to the requirements of: c, quality, environmental occupational health & tai safety standards ISO 30 ISO 14001 and OHSAS 180701

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