

PRODUCT DATA SHEET

SikaGrout[®]-214-11 TH

High Performance Non-Shrink Grout for Large Volume

DESCRIPTION

SikaGrout[®]-214-11 TH is a non-shrink, self-levelling, cementitious grouting mortar with extended working time to suit local ambient temperatures.

USES

- Machine foundations
- Rail beds
- Columns in precast construction
- Anchor bolts
- Bridge bearings
- Cavities, gaps, recesses, etc.

FEATURES

- Excellent flowability
- Good dimensional stability
- High strengths, adjustable consistency
- No bleeding
- Non-toxic, non-corrosive
- Ready and easy to use
- Economical
- Impact and vibration resistant

PRODUCT INFORMATION

Packaging	25 kg / bag
Appearance and colour	Grey Powder
Shelf life	9 months from date of production.
Storage conditions	Keep in unopened, undamaged original packaging and protected from direct sunshine in dry condition.
Bulk density	Approx. 1.2 kg /L

TECHNICAL INFORMATION

Compressive strength		Water Content (13%)	Water Content (14%)	(ASTM C109)
	1 day	~350	~300	
	7 days	~600	~550	
	28 days	~800	~750	
Note: Test at 28°C in lab condition. (kgf/cm ²)				
Bleeding	0			(ASTM C232)

APPLICATION INFORMATION

Consumption	Approx. 2 kg of powder for one litre of mortar. For 1 m ³ of mortar approx. 75 x 25 kg bags and 260 litres of water.			
Flowability	Water Content (%)	Consistency (J rote)		
	13	<15 seconds		
	14	<10 seconds		
	Note: Test at 28°C in lab condition.			
Setting time	Water Content (%)	Initial	Final	(ASTM C807)
	13	~ 4 : 00	~ 7 : 00	
	14	~ 5 : 00	~ 8 : 00	
	Note: Test at 28°C in lab condition (hours : minutes)			

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

Use SikaGrout®-214-11 TH for grouting. Min. gap 10 mm. Max. gap 70 mm. At temperatures lower than 20°C setting time and strength gain will be slower. Normal curing practice should be observed for at least 3 days.

- Not to be used for overlay or repair works in unconfined spaces
- Refer to the Method Statements for Cementitious Grouts for more information
- Non-shrink definition as per ASTM C1107 applies
- Avoid application in direct sun and/or strong wind
- Do not add water over recommended dosage
- Apply only to sound, prepared substrate

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

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete surfaces should be clean, sound and free from oil, greases, laitance and loose particles. Metal surfaces (iron and steel) should be free from scale, rust, oil and grease. Absorbent substrates must be saturated thoroughly, but no standing water.

MIXING

Powder should be added to the pre-gauged water to suit the desired consistency. For J rote <10 seconds, approx. 3.5 litres of water. (approx. 14% by weight of SikaGrout®-214-11 TH) should be used. The amount of water may be reduced within the flowable consistency if desired. Mix mechanically with a low speed drill (max. 500 RPM) with a disc agitator attached, until a smooth, even consistency is achieved.

APPLICATION

Pour mortar after mixing. Ensure, that air entrapped into the grout is allowed to escape. When carrying out baseplate grouting, ensure sufficient head of pressure is maintained to keep mortar flow uninterrupted. Make sure, that necessary formwork is firmly in place and watertight.

Grouting of Large Cavities

Depending on the volume to be filled, large aggregates, eg. 4-8 mm, 8-16 mm or 16-32 mm may be added to the SikaGrout®-214-11 TH at a ratio of between 50-100%. Round aggregates are more suitable than crushed. Vibrate to ensure good compaction.

Grouting of Machine Beds

Prewet thoroughly, no standing water in bolt holes. If possible, grout anchor bolts first, then the mortar bed in a second operation. Ensure continuous flow of mortar. Distance between anchor bolt and substrate to be at least 3 x max. diameter of mortar aggregates (approx. 10 mm.)

Grouting of Base Plates

Prewetting for approx. 24 hrs, no standing water. Maintain constant hydro-static pressure to ensure continuous flow. Use cable or chain to make sure that all cavities are filled. Make sure that entrapped air can escape.

CLEANING OF EQUIPMENT

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

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.

Sika (Thailand) Limited

700/37 Moo 5 Amata City Chonburi
Industrial Estate, T. Klong Tamhru
A. Muang, Chonburi 20000, Thailand
Tel : +66 3810 9500
E-mail : sikathai@th.sika.com
Website: tha.sika.com



Product Data Sheet

SikaGrout®-214-11 TH
December 2024, Version 04.01
020201010010000311

SikaGrout-214-11TH-en-TH-(12-2024)-4-1.pdf