BUILDING TRUST

PRODUCT DATA SHEET

SikaGrout®-200 PT id

HIGH PERFORMANCE, ZERO BLEED, SAND FREE, CEMENTITIOUS GROUT FOR POST-TENSIONED STRUCTURE

DESCRIPTION

SikaGrout®-200 PT id is a non-shrink, cementitious grout with a unique shrinkage compensating mechanism. It is non-metallic and contains no chlorides. With a special blend of shrinkage-reducing and plasticizing / water-reducing agents, SikaGrout®-200 PT id is a shrinkage compensated material.

USES

SikaGrout®-200 PT id may only be used by experienced professionals.

- Use for horizontal and vertical grouting of ducts within bonded, post-tensioned structures
- Use to grout and fill or repair voids within ducts of post-tensioning strands for corrosion protection
- Use for grouting with tight clearance requirements

CHARACTERISTICS / ADVANTAGES

- Sand free allows filling and repairing of voids within ducts of post-tensioned structures
- Pre-packaged in accordance with ISO 9001 which ensures consistency of the manufactured material
- Silica fume enhanced for low permeability
- Easy to use, just add water
- Zero bleeding, even at high flow
- Low heat build-up
- Excellent for pumping:
    1. Does not segregate even at high flow
    2. No build-up on equipment or hoppers
- Non-corrosivem does not contain chlorides
- Superior freeze / thaw resistance

PRODUCT INFORMATION

Composition	Portland cement
Packaging	20 kg bag
Appearance / Colour	Powder / Grey
Shelf life	6 months from the date of production if stored in undamaged and unopened original sealed bags
Storage conditions	Stored in a cool dry placed between +5 °C and +35 °C
Density	~2.10 kg/L (ASTM C-138)

TECHNICAL INFORMATION

Compressive Strength	1 day	~25 N/mm²	(ASTM C-942)
	3 days	~35 N/mm²	(+25 °C / 60 % r.h.)
	7 days	~45 N/mm²	
	28 days	~55 N/mm²	

APPLICATION INFORMATION

Mixing Ratio	5.2 L per 20 kg bag (water per powder = 26 % by weight)		
Consumption	~1 667 kg/m³		
Yield	12.0 L per 20 kg bag		
Flowability	Flow table (mm)	300 - 330 mm	(ASTM C230/230M)
Product Temperature	< 30 °C, max		
Ambient Air Temperature	+5 °C min. (temperatures must be rising at the time of application) +35 °C max. (at the time of application)		
Substrate Temperature	+5 °C min. (temperatures must be rising at the time of application) +35 °C max. (at the time of application)		
Pot Life	60 min		
Setting Time	~ 3 to 8 h		

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Cable Duct Grouting:
Ensure that ducts, opening, inlets and outlets are clean, free of dirt and debris, fuel, oils and any other contaminants at all times.

Other grouting application:
Remove all dirt, oil, grease, and other bond-inhibiting materials by mechanical means. Anchor bolts to be grouted must be degreased with a suitable solvent cleaning agent. Concrete must be sound and roughened to promote mechanical adhesion. Prior to pouring the concrete, surfaces should be in a saturated surface dry condition.

MIXING

For best results use a colloidal mixer. Alternatively, mechanically mix with a high speed drill (2500 rpm) and Sika® jiffy paddle. Mix for approximately 3 minutes after the addition of the last bag or until a homogeneous mix is achieved. Continue to agitate material in the holding hopper to achieve optimum flow.

The method of mixing may significantly affect the material properties, particularly flow. At higher temperatures and/or with higher water amounts, the grout will behave less thixotropically. Therefore, it may be more appropriate to measure the flow using the standard flow cone test (ASTM C-939)

Specific on site testing by the engineer is recommended to ensure that the mixing and placement methods result in the specified requirments.

Add appropriate quantity of clean water. Add bag of material to mixing vessel.

APPLICATION

Make sure all forming, mixing, placing, and clean-up materials are on hand. The grout should be used within 60 minutes from the start of mixing.

The method of pumping the grout must ensure complete filling of the ducts and complete surrounding of the strands or bar. A mock-up should be completed on on-site and inspected by the engineer to ensure that the placement means and methods yield the specified results.

When grouting ducts or other critical element, it is highly recommended that experienced, trained technicians complete the work.

CLEANING OF EQUIPMENT

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

IMPORTANT CONSIDERATIONS

- Minimum application thickness: 3 mm
- Maximum application thickness (neat): Comply with PTI (Post-Tensioning Institute) specification for grouting of post-tensioned structures.
- Do not use as a patching or overlay mortar or in unconfined areas.
- Material must be placed within 60 minutes of mixing.
- As with all cement based materials, avoid contact with aluminium to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminium bars, rails, post, etc. With an appropriate epoxy coating.

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.

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 the exact product data and uses.

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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

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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