BUILDING TRUST

PRODUCT DATA SHEET

SikaGrout®-9370

(formerly MFlow 9370)

High strength grout for onshore wind turbine foundations using anchor cage design

DESCRIPTION

SikaGrout®-9370 is a shrinkage compensated grout which when mixed with water, produces a homogeneous, highly flowable and pumpable grout with high early and final strength. Latest best binder packing models and applied cementitious nanotechnology produces a grout with superior technical performance, exceptional rheological properties, and, uniquely, extended open times.

USES

SikaGrout®-9370 has been especially formulated for large scale, pump applications.

- Void filling in onshore wind turbine installations
- Typically used with anchor cage design
- Grouting under harsh conditions, e.g. at temperatures as low as 2°C or as high as 40°C.
- For application in short weather windows

Contact the Technical Department of your local Sika office regarding any application or dimensions required not mentioned here.

FEATURES

- Compressive strength class C80/95.
- Can be applied in the shortest weather windows due to high early strength build-up, i.e.≥ 50 MPa @ 24hrs at 20°C
- Excellent strength gain.
- No segregation or bleeding to ensure consistent final physical performance and to prevent pump blockages.
- Pumpable over long distances and heights.
- Extended pot life.
- For applications in a wide temperature range.
- Excellent flow properties reduce installation times and costs as well as reducing pump pressures and wear.
- Short mixing times
- Volume stable
- Dust reduced for ease of handling and safety of workers.
- Only water to be added.
- Excellent load transferring properties between concrete elements and between concrete and steel flanges.

PRODUCT INFORMATION

Packaging	SikaGrout®-9370 is supplied in 25 kg bags.	
Shelf life	12 months from date of production	
Storage conditions	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions.	
Density	Approximately 2.3 gr/cm³	(DIN 18555-2)

TECHNICAL INFORMATION

Compressive strength

Age	N/mm²	
1 day	≥ 45	(EN 12190) 40 x 40 x 160 mm prisms
7 days	≥ 80	
28 days	≥ 95	

Characteristic compressive strength	N/mm²
150 x 300 mm cylinders	91
150 mm cubes	99

Early compressive strength classification:
A (acc. DAfStb VeBMR Rili)

Compressive strength classification:
C80/95 (acc. DAfStb VeBMR Rili)

Exposure classes:
XO, XC4, XD3, XF3, XA2, WF (EN 206-1, DIN 1045-2)

Modulus of elasticity in compression	≥ 30.000 N/mm²	(EN 13412)
Flexural-strength	≥ 12 N/mm²	(EN 196-1) 40 x 40 x 160 mm prisms
Shrinkage	SKVM 0	(acc. DAfStb VeBMR Rili)
Ring test	No cracking after 180 days	(Coutinho-ring test)
Capillary absorption	≤ 0.05 kg / m².h$^{-0.5}$	(EN 13057)
Resistance to fire	A1 (fl)	(EN13501-1)

APPLICATION INFORMATION

Consumption	1000 kg powder will yield approximately 500 litre of mixed grout.	
Layer thickness	25 - 250 mm	
Flowability	f3 (≥ 750 mm)	(acc. DAfStb VeBMR Rili)
Material temperature	+2 °C min. / +40 °C max.	
Ambient air temperature	+2 °C min. / +40 °C max.	
Mixing ratio	Approximately 3.5 lt / 25 kg powder	
Substrate temperature	+2 °C min. / +40 °C max.	
Pot Life	≥ 120 minutes	
Setting time	≤ 6 hours	

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.

FURTHER DOCUMENTATION

Sika Method Statement: SikaGrout®-9370

ECOLOGY, HEALTH AND SAFETY

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat or drink while working and wash hands when taking a break or when the job is completed. SikaGrout®-9370 contains cement. Avoid contact with eyes and prolonged contact with skin. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Call a physician. In case of contact with skin, wash skin thoroughly. Specific safety information referring to the handling and transport of this product can be found in the Material Safety Data Sheet. Disposal of product should be carried out according to the local legislation in force. Responsibility for this lies with the final own-

er of the product.

APPLICATION INSTRUCTIONS

SikaGrout®-9370 has been especially formulated for use in specific applications. As such SikaGrout®-9370 should be installed by experienced fully trained contractors.

NOTES ON INSTALLATION

- Sands or other products that could affect the products properties must not be added.
- Seek advice for any application not covered in this datasheet.
- SikaGrout®-9370 which will be exposed to strong drying conditions, e.g. mortar which is directly exposed to heavy wind and/or direct sunlight, should be protected with moist cloth or plastic foil, or by us-ing appropriate curing agents.
- The temperature of the grout material, mixing water and elements coming in contact with the mixed grout should be in the range of +2°C to +40°C. When grouting in environments below +2°C or above +40°C contact our Technical Department.

EQUIPMENT

Mixing time	Approximately 3 minutes
Mixer type	e.g. pan mixer
Application method	One continuous pour

CLEANING OF EQUIPMENT

Tools and spillages can be cleaned with water while SikaGrout®-9370 is still uncured. Once hardened, the material can only be removed mechanically.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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