

PRODUCT DATA SHEET

SikaGrout® UW-MY

SHRINKAGE COMPENSATED CEMENTITIOUS GROUT FOR UNDERWATER APPLICATIONS

DESCRIPTION

SikaGrout® UW-MY is a ready to use, cementitious grout that can be used for applications underwater. The grout, when properly mixed, will have no significant 'wash out' of the cement phase. SikaGrout® UW-MY is a blend of Portland cement, carefully selected and graded aggregates, and Sika admixtures, enabling it to achieve excellent flow, non washout characteristics, and high compressive strength.

USES

SikaGrout® UW-MY can be used for free flowing or pumped grout applications underwater, for reinstating concrete, such as:

- Bridge columns
- Pillars
- Piles
- Spilways
- Dams

CHARACTERISTICS / ADVANTAGES

- There is no significant 'wash-out' of cement paste when placed underwater
- Effectively displaces water
- Shrinkage compensating properties
- High early & 28-day strengths
- Does not segregate or bleed
- Good impact, vibration and thermal resistance
- Non-corrosive to steel or iron

PRODUCT INFORMATION

Packaging	25 kg bag
Appearance / Colour	Grey powder
Shelf Life	6 months from date of production
Storage Conditions	Store properly in undamaged and unopened, original sealed packaging, in dry conditions between +10 °C to +30 °C. Protect from direct sunlight, rain and water.

TECHNICAL INFORMATION

Compressive Strength	1 day	15 MPa	(ASTM C-109)
	7 days	40 MPa	
	28 days	60 MPa	

APPLICATION INFORMATION

Mixing Ratio	Add 4.3–4.7 litres of water per 25 kg bag	
Fresh Mortar Density	~2 200 kg/m ³ (depending on consistency and temperature)	
Yield	13.3 L per 25 kg bag	
Setting Time	Initial	~4 hours
	Final	~5 hours

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

All surfaces must be clean, sound and free from oils, grease or other surface contaminants. If the concrete surface is defective, or has laitance, it must be cut back to a sound base. Permanently immersed substrates should be prepared by sand blasting or high pressure water jet. Non-permanently immersed substrates can also be prepared this way, or by scrubbing.

Formwork

The formwork used must be leak proof to allow SikaGrout® UW-MY to be free flowing.

MIXING

SikaGrout® UW-MY must be mechanically mixed using a mechanical forced action grout mixer (maximum speed: 500 rpm). It is essential that mixing is carried out in a manner so that the grouting operation may continue without interruption.

SikaGrout® UW-MY shall be mixed using clean water. Add the powder to approximately 80 % of the total water content while mixing. The remaining 20 % of the water component is to be added while continuing to mix. The total water content is 4.3–4.7 l for each 25 kg bag of powder. Mix the grout until it appears homogeneous. Allow to stand so any entrapped air can escape. Do not add more water to increase flow of grout if a mix has stiffened due to time delays. If grout is unworkable, discard.

APPLICATION

SikaGrout® UW-MY can be poured or pumped through a flexible tube (minimum diameter of 50 mm) to the lowest section of the form. The grout flow must be restricted during the pour so that the water is not entrapped. The outlet of the flexible tube can be raised to reduce pressure; however, it should never be raised above the surface level of the grout. SikaGrout® UW-MY can be placed in thickness of up to 50 mm above water, and 100 mm underwater. Any grout pour that exceeds this thickness should be done in stages, or have stone aggregate added to it, to reduce the exothermic heat.

When adding aggregate, use smooth rounded aggregate, ranging from 2 mm to 10 mm.

CURING TREATMENT

Curing will not be required in submerged situations. Grout cast above the water should be cured using suitable methods such as plastic sheeting, wet hessian, or Antisol® liquid membranes.

CLEANING OF TOOLS

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

IMPORTANT CONSIDERATIONS

- Do not apply SikaGrout® UW-MY in temperatures below 5 °C.
- Never raise the outlet of the flexible tube used to place SikaGrout® UW-MY above the surface level of the grout.

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.

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.

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.

Sika Kimia Sdn. Bhd.

Lot 689, Nilai Industrial Estate, 71800 Nilai
Negeri Sembilan D.K., Malaysia
Phone: +606-7991762
Fax: +606-7991980
e-mail: info@my.sika.com
Website: www.sika.com.my



Product Data Sheet
SikaGrout® UW-MY
October 2018, Version 01.01
020201010010000136

SikaGroutUW-MY-en-MY-(10-2018)-1-1.pdf