

PRODUCT DATA SHEET

SikaGrout® UW

SHRINKAGE COMPENSATED CEMENTITIOUS GROUT FOR UNDERWATER APPLICATIONS

DESCRIPTION

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

USES

SikaGrout-UW can be used individually for underwater grouting or as a system in conjunction with Sika Pile Jacket systems or other confinement jacket repair systems for rehabilitation of concrete, steel and timber piles in marine applications.

- Bridge Column repairs.
- Piles repair.
- Slipways.
- Dams.
- Underwater grouting.

CHARACTERISTICS / ADVANTAGES

- Economical
- Good resistance to 'wash-out' of cement phase when placed underwater.
- Effectively displaces water.
- Shrinkage compensating properties.
- High early & 28 day strengths.
- Good impact, vibration and thermal resistance.
- Non-corrosive to steel or iron.
- Used with Sika Pile Jacket and other pile jacket systems.

PRODUCT INFORMATION

Composition	Cementitious powder
Packaging	20kg bag, 1000kg Bulk bag to order

Appearance / Colour	Grey Cement powder	
Shelf life	12 months when stored in original sealed packaging in dry conditions.	
Storage conditions	Store SikaGrout UW in dry conditions in un-opened original packaging.	
Density	2200kg/m ³ approx.(mixed)	
Maximum Grain Size	Maximum aggregate size approx.2mm	
Compressive Strength	Time	Strength MPa
	1 Day	>30 MPa
	7 Day	>60 MPa
	28 Day	>70 MPa
	(AS1478.2) 50mm x 50mm cubes	
Tensile Adhesion Strength	>2.0MPa to submerged concrete	
Mixing Ratio	3.5-3.7Lt per 20kg	
Yield	11 litres per 20kg bag	
Layer Thickness	SikaGrout-UW can be placed in thicknesses of up to 100mm above water, and 200mm underwater. Any grout pour that exceeds this should be done in stages, or have stone aggregate added to it, to reduce the exothermic heat. When adding aggregate, use SikaGrout Aggregate or smooth rounded aggregate, ranging from 2mm to 10mm. It is recommended that the maximum aggregate addition is 20kg of SikaGrout-UW.	
Pot Life	20 minutes approx. @20°C	
Setting Time	Initial - 5 hrs 30 mins @ 20°C Final - 6 hrs 15 mins @ 20°C	

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 scabbling.

MIXING

Equipment
SikaGrout-UW must be mechanically mixed using a mechanical forced action grout mixer. It is essential that mixing is carried out in a manner so that the grouting operation may continue without interruption. Mixing
Always add powder to the water. Place approximately 70% of the total water content into the bucket. Add powder slowly to the water while mixing till bag is empty. Then slowly add remaining 30% of the water component is to be added while continuing to mix. The total water required for each 20kg bag of powder is 3.7 litres. Mix the grout until it appears homogenous (3 to 5 minutes). Al-

low 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

CURING TREATMENT

CLEANING OF EQUIPMENT

Cleaning of uncured material with water. Cured material can only be removed by mechanical means.

FURTHER INFORMATION

IMPORTANT CONSIDERATIONS

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

ECOLOGY, HEALTH AND SAFETY

- Avoid contact with the skin.

- Protective gloves and clothing are recommended when mixing or using this product.
- A full Material Safety Data Sheet is available from Sika on request.

LEGAL NOTES

Disclaimer

Sikagrout and Sikadur products are tested in accordance with Australian Standards and/or Internationally accepted Standards. The published performance data is achieved by testing strictly in accordance to the procedures of these standards. Any test procedures performed by others on our products that are not in strict accordance with the standard in every facet will likely produce results different from the published above. On site testing by others can be affected by external factors such as incorrect mixing methods, poor sampling techniques, varying temperatures, curing, crushing procedures etc. Sika can provide Certificates of Compliance of all products delivered to site prior to installation if required. If results of site testing or testing facilities by others vary from the Sika published data we recommend the following items be reviewed before contacting the manufacturer as one or all of these items could be influencing the results attained on site. These include but are not limited to the following: site conditions, ambient, substrate and product temperature, mixing equipment, mixer speed, pump equipment, contractor experience, and incorrect test methods. Sika Australia do not take responsibility nor have to make a case for any such tests where results of testing by others do not achieve the published data as above.

Important Information

The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms

and conditions of sale.

Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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