

# PRODUCT DATA SHEET

# SikaGrout®-810

(formerly MFlow 810)

NON SHRINK, CEMENTITIOUS GROUT FOR USE IN GENERAL CIVIL ENGINEERING WORKS

## **DESCRIPTION**

SikaGrout®-810 is a ready to use, non-shrink, natural aggregate cementitious grout for use in general civil engineering works. SikaGrout®-810 provides extended working life and high early and ultimate strengths.

#### **USES**

SikaGrout®-810 is recommended for:

- Stanchion baseplates and columns
- Prefabricated concrete panels and beams
- Bridge bearing plates
- Anchor bolts and bars
- Underpinning
- Patch repair works

# **CHARACTERISTICS / ADVANTAGES**

- High strength Provides good early and ultimate strengths which ensure quick return to service and long term durability.
- Non shrink Hardens free of bleeding, settlement and drying shrinkage when placed at flowable consistency
- Flowable consistency Ensures complete filling of even intricate voids often without the need for pumping and strapping.
- Ample working time Remains placeable up to 1 hour, even at high ambient temperatures
- Dense, impermeable grout Provides a good watertight seal.
- Economical Greater volumes of grout can be mixed and handled with less labour.
- Easy to use requires no special mixing equipment, it can be mixed in a pail using a grout stirrer.
- No added chloride Does not add to chloride load on structure.
- Provides complete non shrink performance When tested in accordance with simulated Bedplate Technique
- Versatile Can be placed from flowable to trowelable consistency

# APPROVALS / STANDARDS

SikaGrout®-810 conforms to ASTM C 1107

## PRODUCT INFORMATION

| Packaging           | 25 kg / Bag                               |  |
|---------------------|---|--|
| Shelf Life          | 12 months                                 |  |
| Storage Conditions  | Stored in a cool dry place unopened sacks |  |
| Appearance / Colour | Grey powder                               |  |

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**SikaGrout®-810** September 2024, Version 02.01 020201000000002048

## **TECHNICAL INFORMATION**

| Compressive Strength | Day                                 | Flowable (N/mm²) | Trowelable (N/mm²) |  |
|----------------------|-------------------------------------|------------------|--------------------|--|
|                      | 1                                   | 25               | 45                 |  |
|                      | 3                                   | 50               | 60                 |  |
|                      | 7                                   | 55               | 65                 |  |
|                      | 28                                  | 65               | 85                 |  |
| Yield                | <b>4.5 litres water</b> 13.5 litres |                  | res grout          |  |
|                      | <b>3.4 litres water</b> 12.5 litre  |                  | res grout          |  |
| Flowability          | 35 – 55 cm                          |                  |                    |  |
| Mixing Ratio         | Flowable                            |                  | 4.5 ltr            |  |
|                      | Trowelable 3                        |                  | 3.2 – 3.4 ltr      |  |
|                      | *Base on 25 kg / bag                |                  |                    |  |
| Pot Life             | 30 minutes                          |                  |                    |  |
| Setting Time         | 5.5 hrs - 6.5 hrs                   |                  |                    |  |

## **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.

# **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 (MSDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

## SUBSTRATE PREPARATION

The substrate should be properly prepared and should be free from contamination, laitance and loose material. Thoroughly saturate the substrate with water at least 2-3 hours prior to pouring the grout. All free water ponding should be blown out of the void just before pouring the grout.

#### **MIXING**

Water addition may be affected by temperature conditions on site. Trials are recommended to determine the correct water requirement. SikaGrout®-810 should be mixed using a suitable mixer. For flowable consistency, use a hand drill and paddle for small works up to two bags at a time and specialise grout mixers for larger volume. Drum type mixers may not provide sufficient mixing efficiency to derive the optimum performance from the grout. The correct volume of water should be added to the mixer followed by the powder. Mixing should continue until the grout has a smooth, lump free appearance. This will normally be between

3 – 5 minutes after mixing has started.

#### **APPLICATION**

Carefully remove the formwork once the Sika Grout®-810 is self-supporting and cut the shape of the shoulder with a trowel. Preferably the shoulder should be cut to a 45° angle to minimise stresses.

#### **CURING TREATMENT**

As for all cementitious materials, curing is essential to prevent rapid drying out of the grout and shrinkage caused by the water loss. Curing should be effected by accepted methods such as curing compounds, polythene sheet, wet hessian or water ponding. If a shaped shoulder is required, it should be formed before the grout has reached its final set.

#### **CLEANING OF TOOLS**

Clean tools and equipment with water before SikaGrout®-810 has hardened, otherwise mechanical cleaning will be required.



## 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. 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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