

**BUILDING TRUST** 

## PRODUCT DATA SHEET

# SikaGrout<sup>®</sup>-951

(formerly MFlow 951)

#### High strength, non-shrink cementitious grout

#### DESCRIPTION

SikaGrout<sup>®</sup>-951 is a ready to use product in powder form, which requires only the on-site addition of water to produce a high strength (compressive strength >90N/mm<sup>2</sup>) non-shrink grout of predictable performance.

#### USES

SikaGrout<sup>®</sup>-951 is formulated for use at any consistency from fluid to plastic, and may be used with confidence for bedding, grouting and precision bearing operations such as.

- Gas or steam turbines
- Generators
- Presses
- Crane rails
- Milling machines
- Precast elements
- Anchor bolts

### **PRODUCT INFORMATION**

### **CHARACTERISTICS / ADVANTAGES**

- Non-shrink.
- Adjustable consistency.
- Proven and predictable performance.
- Excellent workability retention even at high ambient temperatures.
- High bond strength to steel and concrete.
- High early strength development even at fluid consistency.
- Good fatigue and impact resistance. Impermeable.
- High compressive strength
- Can be extended by the addition of 5 -12mm clean washed aggregate when large volume void filling is required

Packaging	SikaGrout®-951 is supplied in 25kg moisture- resistant bags. Approximately 06 months when stored as above in original sealed bags. Store out of direct sunlight, clear of the ground on pallets protected from rainfall. Avoid excessive compaction. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.		
Shelf Life			
Storage Conditions			
TECHNICAL INFORMATION			
Comprossive Strongth	(Flowable) ASTMC 100, 70mm Cube		

Compressive Strength	(Flowable) ASTM C 109, 70mm Cube			
	1 Day ≥40Mpa			
	3 Days ≥60Mpa			
	7 Days ≥70Mpa			
	28 Days ≥90Mpa			

PRODUCT DATA SHEET SikaGrout®-951 September 2024, Version 02.01 020201010010000551

28 days ≥11Mpa ASTM C 78

Water Penetration under Pressure

**Chloride Ion Diffusion Resistance** 

Very low ASTM C1202 / AASHTO 277

<10mm @ 5 bar penetration BS EN 12390 Part 8

Yield	12.25 litres/25kg bag	12.25 litres/25kg bag at 3.25 litres water addition. 78 x 25kg bags / $m^3$				
Mixing Ratio	Water addition	Flowable	3 liters / 25 kg			
	Water addition	Fluid	3.4 liters / 25 kg			
	No bleed water is ap rates.	No bleed water is apparent (ASTM C-232) at recommended water addition rates.				

## **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.

## USES

The temperature of both the grout and elements coming into contact with the grout should be in the range of >10°C to >35°C. Do not use water in an amount or at a temperature that will produce a consistency more than fluid or cause mixed grout to bleed or segregate. SikaGrout®-951 should be laid at a minimum thickness of 20mm and to a maximum depth of 100mm.

To simulate on-site conditions, it is necessary to restrain cubes for the first 24 hours immediately after casting.

DO NOT OVERWORK AND AVOID USING MECHANICAL VIBRATION. UNDER NO CIRCUMSTANCES SHOULD SikaGrout<sup>®</sup>-951 BE RETEMPERED BY THE LATER ADDI-TION OF WATER.

It is essential that a mechanically powered grout mixer is used to obtain the optimum properties.

## 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.

## **APPLICATION INSTRUCTIONS**

#### SURFACE PREPARATION

The surface onto which the grout is to be applied should be scrabbled to remove laitance and expose aggregate. Do not use bush hammers or similar preparation equipment that can crush the aggregate but leave it in place. The surface must be free of oil, dust, dirt, paint, curing compounds, etc. Soak area to be grouted with water for 24 hours prior to grouting to minimize localized absorption and to assist in the free flow of the grout. Surfaces should be damp but free of standing water.

Particular attention should be paid to bolt holes to ensure that these are water-free. Use oil free compressed air to blow out bolt holes and pockets as ne-

PRODUCT DATA SHEET SikaGrout®-951 September 2024, Version 02.01 020201010010000551

#### cessary.

Base plate, bolts, etc. must be clean and free of oil, grease and paint etc. Set and align equipment. If shims are to be removed after the grout has set; lightly grease them for easy removal.

Ensure formwork is secure and watertight to prevent movement and leaking during the placing and curing of the grout. The area should be free of excessive vibration. Shut down adjacent machinery until the grout has hardened.

In hot weather, base plates and foundations must be shaded from direct sunlight. Bags of grout should be stored in the shade prior to use.

In cold weather, the temperature of base plates and foundations should be raised to >10°C.

#### MIXING

In hot weather use cool water to bring the mixed grout temperature to <30°C.

In cold weather use warm water to raise the mixed grout temperature to >10°C.

Damp down the inside of the grout mixer with water prior to mixing the initial batch of SikaGrout<sup>®</sup>-951. Ensure the mixer is damp but free of standing water. Add the pre- measured quantity of water. Slowly add the SikaGrout<sup>®</sup>-951, mixing continuously. Mix for at least five minutes until a smooth, uniform, lump free consistency is achieved.

#### APPLICATION

Lengths of metal strapping laid in the formwork prior to placing may be necessary to assist grout flow over large areas and in compacting and eliminating air pockets. Pour the grout continuously. Maintain a constant hydrostatic head, preferably of at least 15 cm. On the side where the grout has been poured, allow 10 cm clearance between the side of the form and the base plate of the machine.

On the opposite side allow 5-10 cm clearance between the formwork and the base plate.

SikaGrout<sup>®</sup>-951 is suitable for use with most types of pumping equipment.

Immediately after SikaGrout<sup>®</sup>-951 is placed, cover all exposed grout with clean damp hessian, and keep moist until grout is firm enough to accept a curing membrane.

Should the grout shoulders require finishing work, this should be carried out prior to application of the curing membrane.



**BUILDING TRUST** 

#### 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.

#### Sika Pakistan (Pvt.) Limited

141-CCA Phase IV, DHA Lahore Punjab 54792 Pakistan phone: +92 42 3569 4266 - 67 fax: +92 42 3569 4268 http://pak.sika.com/

PRODUCT DATA SHEET SikaGrout®-951 September 2024, Version 02.01 020201010010000551 SikaGrout-951-en-PK-(09-2024)-2-1.pdf

**BUILDING TRUST** 

