

**BUILDING TRUST** 

# PRODUCT DATA SHEET SikaMur<sup>®</sup> Grout+

# M10 CLASS MASONRY CONSOLIDATION GROUT, BASED ON NATURAL HYDRAULIC LIME

## DESCRIPTION

SikaMur<sup>®</sup> Grout+ is a ready-mixed grout based on Natural Hydraulic Lime (NHL 3.5). It is a cement free, highly fluid grout, for consolidation of masonry structures. It is applied by gravity, pouring it into holes or by low-pressure injection.

# USES

SikaMur<sup>®</sup> Grout+ fills holes, cracks, crevices and cavities in brick, sand, natural stone or tuff masonry constructions. The fluid-like consistency makes it possible to apply it either by pouring or by low-pressure injection. It is therefore suitable for smoothing and re-aggregating existing uneven structures or for consolidating and structurally reinforcing stone, brick or mixed masonry.

SikaMur<sup>®</sup> Grout+ is also suitable for securing metal rods running within masonry for structural strengthening of masonry crack reinforcement (the "stitching reinforcement" technique).

SikaMur<sup>®</sup> Grout+ can be used in combination with SikaMur<sup>®</sup> rehabilitation mortars for masonry with capillary rising moisture phenomena and soluble salts.

# **CHARACTERISTICS / ADVANTAGES**

- Natural Hydraulic Lime (NHL 3.5) based, cement free
- Easy pouring or low-pressure injecting
- Once mixed, the grout is extremely fluid and non-viscous whilst also being cohesive and not segregating
- Very low heat generation during setting and hardening
- Final mechanical strength and modulus of elasticity are compatible and suitable to those of masonry structures
- After hardening, the masonry structure is aggregated and consolidated, restoring its overall mechanical performance
- The grout's high degree of fluidity means it can fill a large amount of internal holes and gaps
- Suitable for masonry with capillary rising damp and soluble salts
- SikaMur<sup>®</sup> Grout+ will not chemically react with any water-soluble compounds present in the constituents of the masonry

# **APPROVALS / CERTIFICATES**

CE-marking and Declaration of Performance as Masonry Mortar, Class M10 according to EN 998-2:2010, based on certificate of factory production control issued by notified factory production control certification body and type testing.

# Chemical baseOne-component dry mix mortar based on natural hydraulic lime (NHL 3.5),<br/>sand and special additives.Packaging25 kg lined paper bagsAppearance / ColourBeige powderShelf life12 months from date of productionStorage conditionsStore properly in dry conditions in undamaged and unopened original<br/>sealed packaging.

**PRODUCT INFORMATION** 

Product Data Sheet SikaMur® Grout+ June 2018, Version 03.02 020405020060000001 Density

1.95 ± 0.05 kg/L Dmax: 0.5 mm

Maximum Grain Size

**TECHNICAL INFORMATION** 

Compressive Strength	Class M10		(EN 998-2)
	<b>7 days</b> ≥7.5 MPa	<b>28 days</b> ≥10.0 MPa	(EN 1015-11)
Thermal Conductivity	0.27 W/mk		(EN 1745:2002 Table A.12)

#### **SYSTEMS**

System Structure

SikaMur<sup>®</sup> Grout+ is part of the Sika<sup>®</sup> Rehabilitation system range for damp masonry renovation, and for this purpose ideally should be used in combination with:

SikaMur <sup>®</sup> InjectoCream-100	Silane based Injectable <b>Damp Proof</b> <b>Course</b> for horizontal rising damp treatment	
SikaMur <sup>®</sup> Dry	Ready-mixed hand applied renovat- ing mortar for damp masonry	
SikaMur <sup>®</sup> -1000 SP	Ready-mixed <b>lightweight</b> machine- or hand applied renovating mortar for damp masonry	
SikaRep <sup>®</sup> -200 Multi/Sika	Repair mortar for masonry and glass	
MonoTop <sup>®</sup> -722 Mur E + SikaWrap <sup>®</sup> -	fiber grid for textile reinforced mor-	
350 G Grid	tars	
SikaMur <sup>®</sup> Finish	Ready-mixed lime based highly breathable finishing layer to finish SikaMur <sup>®</sup> Dry or SikaMur <sup>®</sup> -1000 SP dehumidifying renovation mortars	
SikaMur <sup>®</sup> Color I or E	Lime based coloured paint for tradi- tional or dehumidifying renders or plasters, to finish and protect SikaMur <sup>®</sup> Finish and/or SikaMur <sup>®</sup> Seco-21	

# **APPLICATION INFORMATION**

Mixing Ratio	7.75–8.25 litres of clean fresh water per 25 kg (water/powder ratio 31 % to 33 %)	
Consumption	~ 1.48 kg of powder for 1 liter of fresh mortar	
Yield	~16.9 L of fresh mortar per 25 kg bag	
Pot Life	Approximately 35 min at +20 °C	

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

Seal all superficial gaps such as joints between sections, cracks, crevices, preventing the freshly applied product from leaking through them.

Install a closed injection circuit. At least 24 hours before injection-filling with SikaMur<sup>®</sup> Grout+ start to inject fresh water for saturating the pores and for removing any loose particles.

#### MIXING

Use grout mixers with a low rotation speed. Pour 80–90 % of the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly for 3–5 minutes. Add additional water during the mixing time if necessary to the maximum specified amount and adjust the grout to the required consistency.

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#### APPLICATION

Drill a series of holes (16-24 mm in diameter with a sufficient depth) slightly angled downwards into one side of the masonry. The holes shall be arranged in the form of a regular horizontal and vertical grid, at a spacing of approximately 80–120 cm. The pattern and spacing of the grid depend on the masonry thickness and the structural requirements.

Insert the injection tubes into the holes and fix with quick-setting grout.

After mixing, pour the fresh grout into the injection pump and inject, starting from the injection tubes at the lowest level, to avoid liquid grout leaking from adjacent tubes. Make sure to close any injection tubes where fluid material is leaking out. Only proceed to inject into a higher level tube if fluid SikaMur® Grout+ flows out from all injection tubes at the previous lower level.

2-3 days after the first injection drill a second series of holes into the masonry. Arrange the holes in a grid pattern, centered in between the previously injected holes.

Insert injection tubes and repeat the injection following the same procedure.

If using SikaMur® Grout+ for pouring, the grout must be poured by gravity into the relevant cavity.

#### **CLEANING OF EQUIPMENT**

Removal of fresh remnants from tools and application equipment can be carried out using water immediately after use. Hardened / cured material can only be mechanically removed.

## **IMPORTANT CONSIDERATIONS**

Use SikaMur® Grout+ within the stated pot life. Do not add water after this period of time.

# **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

This product is non-toxic, however its composition has alkaline chemical properties. It is therefore advised to wear a respiratory protective mask, gloves and protective eye-wear.

# LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and enduse 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.

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