

## PRODUCT DATA SHEET

# SikaCeram<sup>®</sup>-500 TG

Water Resistant, Polymer modified, Cementitious Tile Grout

### DESCRIPTION

SikaCeram<sup>®</sup>-500 TG is a 1-component, polymer modified and water resistant cementitious tile grout for joints of up to 4 mm. It is particularly used in conjunction with SikaCeram<sup>®</sup> tile adhesives. Suitable for use in hot and tropical climatic conditions.

### USES

SikaCeram<sup>®</sup>-500 TG is suitable for grouting joints in:

- Ceramic tiles
- Suitable for indoor and outdoor application
- Brick, marble and stone
- Terrazzo

### CHARACTERISTICS / ADVANTAGES

- Easy to use, requires only the addition of water
- Long open time (enough time to clean residues from the tiles after application)
  - Hardens without cracking or shrinkage
  - Water-repellent and impermeable to many liquids
  - Good abrasion resistance
  - Very good adhesion to unglazed surfaces
  - Available in various colours
  - Mould-inhibiting and fungicide
  - UV resistant

### APPROVALS / CERTIFICATES

SikaCeram<sup>®</sup>-500 TG follows the requirements of EN 13888 for class CG1.

### PRODUCT INFORMATION

<b>Composition</b>	Cement, polymers, fillers and additives.
<b>Packaging</b>	5 kg and 10 kg bag
<b>Appearance / Colour</b>	Coloured powder. Available in 22 colours. Further colours available upon request, subject to a minimum product order.
<b>Shelf life</b>	12 months from date of production if stored properly in original sealed packaging.
<b>Storage conditions</b>	Store in cool and dry conditions in unopened, undamaged and sealed original packaging at temperatures between +10 °C and +40 °C. Protect from direct sunlight, heat and moisture.
<b>Maximum grain size</b>	0.150 mm

### TECHNICAL INFORMATION

<b>Abrasion resistance</b>	< 2000 mm <sup>3</sup>	(EN 12808-2)
<b>Compressive strength</b>	≥ 15 N/mm <sup>2</sup> (after dry storage)	(EN 12808-3)

<b>Tensile strength in flexure</b>	≥ 2.5 N/mm <sup>2</sup> (after dry storage)	(EN 12808-3)
<b>Shrinkage</b>	≤ 3.0 mm/m	(EN 12808-4)
<b>Water absorption</b>	≤ 5.0 g (30 min) ≤ 10.0 g (240 min)	(EN 12808-5)
<b>Joint width</b>	Max. 4 mm	

## APPLICATION INFORMATION

<b>Mixing ratio</b>	30 % cold, clean water by weight of powder (e.g. 3.0 L per 10 kg bag)	
<b>Fresh mortar density</b>	~1.80 kg/l	
<b>Consumption</b>	The consumption of SikaCeram®-500 TG is dependent upon the depth and width of the tile joint being grouted. In general, one 10 kg bag will yield 7.2 litres of fresh mortar.	
<b>Ambient air temperature</b>	+5 °C min. / +45 °C max.	
<b>Substrate temperature</b>	+5 °C min. / +40 °C max.	
<b>Pot Life</b>	45 - 60 min (+25 °C)	
<b>Waiting time</b>	(+25 °C)	
	Available time for cleaning residual material	60 minutes with water and sponge
	Foot traffic	Min. 24 hours
	Fully serviceable	Min. 7 days

## 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.

## IMPORTANT CONSIDERATIONS

- Do not exceed the recommended amount of water in the mix. The mix must never be fluid.
- When coloured materials are applied for aesthetics such as on polished porcelain or natural stone tiles, always carry out cleanability testing prior to the application.
- On highly absorbent tiles, it is always recommended to thoroughly pre-dampen the surface (SSD) before grouting.
- Always apply SikaCeram®-500 TG in a continuous operation and do not interrupt this for more than two hours in the same room or area of tiling.
- Do not add anything to the product that is not specified in this Product Data Sheet.
- For brick, marble and stone trial grouting is recommended to check staining effect
- Do not use acid based cleaner to wipe down SikaCeram®-500 TG.
- Protect freshly applied material from rain and water splashes until cured

SikaCeram®-500 TG must not be applied in the following situations:

- For any applications not explicitly described in this Product Data Sheet.
- On water immersed areas like swimming pools.

## 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.

### SUBSTRATE QUALITY / PRE-TREATMENT

- Substrates must be properly cured, structurally sound, clean, dry and free of all contaminants such as dust, dirt, oil, grease, cement laitance, efflorescence, previous coatings, or any other surface treatments or obstructions such as excess tile adhesive, tile joint spacers, etc...
- Depending on the contaminants to be removed, perform adequate preparation techniques, such as jet washing or blastcleaning, in order to remove all traces of any materials that could reduce the product's adhesion on the substrate.
- For applications in hot climates / environments, or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to the product application, but avoid any ponding / standing water on the surface, which must not be damp to touch and not with a dark-matt / wet surface appearance i.e. it must be saturated surface dry (SSD).

### MIXING

- Pour the recommended amount of water into a suitable, clean mixing container. Stir slowly, whilst slowly adding the SikaCeram®-500 TG powder to the water and then mix thoroughly using a low speed (<500

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rpm.) drill mixer until the material is fully homogeneous and lump free.

- After mixing, leave the product to stand and 'mature' for a few minutes, then briefly stir again prior to application. The finished mix has a very creamy consistency, is uniformly coloured and it is easy to apply and spread.
- For areas requiring only small quantities, these can be mixed by hand, however please measure the water : powder ratio carefully, as even small differences in the mix ratio between batches can result in colour shade variations.
- Premature exposure to water or excess water in the mix can result in white efflorescence on the grout surface.
- In case of high-performances demanding applications, such as heavy-traffic floors, replacement of mixing water with SikaLatex® or SikaBond® DV is suggested.
- Important notes: Do not add or allow any additional water to be added into the SikaCeram®-500 TG during or after mixing. Also prevent water contact with the freshly applied material during cleaning operations, or from excess atmospheric humidity and condensation or residual moisture in the substrate etc. It is equally important to avoid wide temperature fluctuations during application and curing, as well as excessive draughts or forced ventilation. This is because excess water, temperature variations and excess ventilation, plus application on very porous tiles or substrates leading to rapid water absorption etc. can all result in colour shade differences.

#### APPLICATION

- SikaCeram®-500 TG is applied using a rubber blade or trowel using cross-hatch techniques, taking care to ensure the joints are filled uniformly across the whole width and along their full length.
- Using the same blade/trowel in a vertical position, remove the excess from the surface of the tiles.
- When the material starts to set, it is possible to begin the initial cleaning step, using a damp sponge. The remaining grout traces on the tile surfaces can easily be removed the next day by wiping with a clean, soft dry cloth. When SikaLatex® or SikaBond DV® has been used instead of water in the mix, this additional step should be done immediately after the initial cleaning with a damp sponge.
- Avoid application in direct sunlight and/or in excessive draughts or strong winds.

#### CLEANING OF EQUIPMENT

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

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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## 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.

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