

PRODUCT DATA SHEET

SikaCeram[®]-405

2 PART EPOXY TILE GROUT AND TILE ADHESIVE

DESCRIPTION

A high performance 2 part epoxy grout suitable for grout installation that require chemical protection. Suitable for joint widths 1-10mm and both wall and floor applications.

SikaCeram[®]-405 can also be used as a thin bed tile adhesive for demanding applications.

USES

For uses as a thin bed tile adhesive and grout in demanding applications such as ;

- Commercial kitchens
- Cold rooms
- Car washes
- Wet areas
- Warehouses
- For general application that require chemical protection
- For application that require maximum stain resistance.

Typical substrates for use as a tile adhesive include;

- Concrete
- Screeds
- Cement boards and sheets
- Plasterboard
- Prepared steel substrate
- Existing tile and stone.

Suitable tile types for grouting and applications include;

- Ceramic
- Porcelain
- Quarry tiles
- Natural Stones
- Glass mosaic

CHARACTERISTICS / ADVANTAGES

- Easy to use
- Highly stain resistant
- Easy to clean
- High chemical resistance
- Frost resistance
- Exceptional bond strength

SUSTAINABILITY

VOC content 14 gm/L

APPROVALS / CERTIFICATES

Resin tile grout: SikaCeram[®]-405 follows the main requirements of EN 13888 Class RG and complies to Requirements of ANSI 118.3 & ANSI 118.8

Tile-setting resin adhesive: SikaCeram[®]-405 follows the main requirements of EN 12004, Class R2 and complies to Requirements of ANSI 118.3 & ANSI 118.8

PRODUCT INFORMATION

Packaging	Kit 5 Kg (A+B)
Shelf life	12 months from date of manufacture
Storage conditions	Store in shade, under normal weather temperature and in dry conditions.
Appearance and colour	Available in various colors, please refer to Sika's tile grout color chart.

Density	1.7 ±0.05 Kg/l @ 25°C
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TECHNICAL INFORMATION

Abrasion resistance	≥250 mm ³	EN 12808-2								
Compressive strength	≥ 45 N/mm ²	EN 12808-3								
Tensile adhesion strength	≥2 (regular conditions) ≥2 (after water immersion)	EN 12004-2								
Shrinkage	< 1.5 mm/m	EN 12808-4								
Skid / slip resistance	≤ 0.5 mm	EN 12004-2								
Water absorption	< 0.1 gm	EN 12808-5								
Consumption	2.5 -2.8 kg/m ² depending on substrate condition using trowel size 4 mm (as tile adhesive)									
Ambient air temperature	+5°C min./+ 35°C Max.									
Substrate temperature	+5°C min./+ 35°C Max.									
Pot Life	45 min @ 25°C Note: The pot life begins when the resin and hardner are mixed. it is shorter at high tempratures and longer at low tempratures.the greater the quantity mixed the shorter the pot life.									
Applied product ready for use	<table border="1"> <thead> <tr> <th>Use</th> <th>Waiting time</th> </tr> </thead> <tbody> <tr> <td>Light foot traffic</td> <td>~24 hours</td> </tr> <tr> <td>Full traffic</td> <td>~ 7 days</td> </tr> <tr> <td>Water Immersion</td> <td>~ 7 days</td> </tr> </tbody> </table>	Use	Waiting time	Light foot traffic	~24 hours	Full traffic	~ 7 days	Water Immersion	~ 7 days	<p>Note: Values are obtained in laboratory conditions, As general rule, Higher tempratures reduce indicated waiting time and lower tempratures increases them.</p>
Use	Waiting time									
Light foot traffic	~24 hours									
Full traffic	~ 7 days									
Water Immersion	~ 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

- Always perform a test on cleanability and staining before grouting/bonding natural stone or any type of cladding with abosrbent or porous substrates.
- Always perform a premilinary test on cleanability if applying on tiles in color contrast.
- do not partially mix. Mix only full sets.
- Do not add fillers or solvents.

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

SUBSTRATE PREPARATION

MIXING

SikaCeram®-405 is a reactive product. This means that it sets through a chemical reaction between the two components A and B. It is therefore curical to ensure that these components are thoroughly mixed with the correct mixing ratio.

Thoroughly mix the base (Comp. A). After mixing the base,pour all the hardener (Comp.B) into the container of the base (Comp.A) and mix with an electric low speed drill (~350 rpm) mixer equipped with a suitable mixing spiral. Mix thoroughly for approx. 3 minutes, until the material is fully homogenoius and lump free. The finished mix has a very creamy consistency, is uniformly coloured and it is easy to apply and spread.

APPLICATION

Tile grout:

SikaCeram®-405 is applied using 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 product in vertical position, remove the excess from the surface of the tile.

Tile adhesive:

SikaCeram®-405 is applied using notched trowel. Apply sufficient product to ensure complete wetting of the backs of the tiles. Tiling must be carried out on freshly applied adhesive, exerting adequate pressure to ensure complete and uniform contact with the adhesive.

Avoid application in direct sunlight and/or strong wind/ draughts.

To lay any tiles larger than 900cm² (e.g. 30x30 cm), the double layer 'buttering' technique is always recommended.

Protect from adverse weather conditions, such as extremely high or low (freezing) temperatures, rain, direct exposure to sun, for at least 12-24 hours from application.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water and/or Sika's thinner immediately after use.

Hardend and/or cured materials can only be removed mechanically.

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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Product Data Sheet

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