

PRODUCT DATA SHEET

SikaCeram® StarGrout

TWO-PACK, EPOXY-BASED TILE GROUT FOR TILE JOINTS 1 TO 15 MM WIDE

DESCRIPTION

SikaCeram® StarGrout is a two-pack tile grout, based on epoxy resin, featuring a smooth and glossy surface in various colours. It is ideal for applications in areas demanding perfect cleanliness.
As tile grout, classified RG according to EN 13888.
As tile adhesive, classified R2 T according to EN 12004.

USES

SikaCeram® StarGrout is suitable for bonding the following types of tiles:

- Ceramic tiles
- Ceramic-, glass-, marble-, wood- made mosaic
- Marble and other natural stone

On the following surfaces, as tile adhesive in indoor and outdoor, on floors and walls:

- Gypsum or cement based substrates
- Old paint
- Old tiles
- Iron
- Fiberglass reinforced plastic

For the following areas of use:

- Swimming pools (including seawater pools), thermal pools, Turkish baths, private and public bathrooms.
- Kitchens.
- Dairies, tanneries, paper-mills, laboratories of all kinds, slaughterhouses, professional kitchens, etc.

CHARACTERISTICS / ADVANTAGES

- Good chemical resistance
- Excellent workability: Easy application and cleaning
- Tough
- Very low water absorption
- Stain resistant
- Frost proof
- Mould-inhibiting
- Abrasion resistant

APPROVALS / STANDARDS

Improved reaction resin adhesive with reduced slip classified R2T according to EN12004:2007. Declaration of Performance n.50124663 assessed by notified laboratory 1599 and provided with the CE marking. Compliance tests for RG class conformity to EN 13888.

PRODUCT INFORMATION

Chemical Base	Epoxy resin, quartz aggregates and specific admixtures.		
Packaging	3 kg plastic buckets (A+B).		
Appearance / Colour	Component A	Dense coloured paste	
	Component B	Viscous liquid	
	Available in 10 colours		
	White	Light grey	Manhattan
	Anthracite	Jasmine	Beige
	Dark brown	Total black	Ash
			Caramel
Shelf Life	24 months from date of production.		

Storage Conditions	In dry place, at temperatures between 10 °C and 30 °C, in the sealed undamaged original packaging.	
Density	Fresh mortar density: ~1.7 kg/l	
Maximum Grain Size	Dmax: 0.2 mm	

TECHNICAL INFORMATION

Abrasion Resistance	$\leq 250 \text{ mm}^3$	(EN 12808-2)	
Compressive Strength	After dry storage	$\geq 45 \text{ N/mm}^2$	(EN 12808-3)
	After freeze/thaw cycles	$\geq 45 \text{ N/mm}^2$	
Tensile Strength in Flexure	After dry storage	$\geq 30 \text{ N/mm}^2$	(EN 12808-3)
	After freeze-thaw cycles	$\geq 30 \text{ N/mm}^2$	
Shrinkage	$\leq 2 \text{ mm/m}$	(EN 12808-4)	
Tensile Adhesion Strength	Initial	$\geq 3.0 \text{ N/mm}^2$	(EN 12003)
	Water immersion	$\geq 2.0 \text{ N/mm}^2$	
	Thermal shock	$\geq 2.0 \text{ N/mm}^2$	

All data are collected from test reports released by laboratory Modena Centro Prove, Notified Body n. 1599.

Chemical Resistance	Resistant to many chemicals. Contact Sika Technical Service for specific information.		
Water Absorption	After 240 min	$\leq 0.1 \text{ g}$	(EN 12808-4)
Skid / Slip Resistance	$\leq 0.5 \text{ mm}$	(EN 1308)	
Service Temperature	-20 °C min. / +100 °C max.		
Joint width	1–15 mm		

APPLICATION INFORMATION

Mixing Ratio	Comp. A : Comp. B = 94 : 6
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Consumption

As tile adhesive

Consumption is dependent on the surface profile and roughness of the substrate, as well as on the application technique (single spreading/floating method or double spreading/buttering method).

As a guide, the approximate consumption is given in the following table:

Size of tiles	Notched trowel size	Consumption
Small	6 mm	~2 kg/m ²
Medium	8 mm	~2.5 kg/m ²
Large	10 mm	~3 kg/m ²

As tile grout

Consumption is dependent on the surface profile and roughness of the substrate as well as on the size of the tiles and the joints between them. As a guide, the approximate consumption is given in following table, expressed in g/m².

Tile Size (cm)	1 mm	5 mm	10 mm	15 mm
Glass mosaic	519			
5 × 5 × 0.4	264	1180	2078	2 776
10 × 10 × 0.6	201	948	1770	2 487
15 × 15 × 0.9	202	971	1853	2 655
20 × 20 × 0.9	152	737	1422	2 060
30 × 30 × 1	113	553	1079	1 580
30 × 60 × 1	85	417	818	1 204
50 × 50 × 1	68	335	660	976
60 × 120 × 1	47	231	459	681

Consumption can be also calculated through the following formula:

$$S \times [(a+b+l)/(a+l)(b+l)] \times l \times h \times d \times 10\,000$$

S = Whole surface (m²)

h = Tile thickness (cm)

a, b = Tile size (cm)

d = Fresh mortar density (kg/l)

l = Gaps size (cm)

Ambient Air Temperature +10 °C min. / +30 °C max.

Substrate Temperature +10 °C min. / +30 °C max.

Pot Life ~45 min

Waiting Time

Before grouting on

Waiting time

Normal-setting adhesive laid floor tiles

24–36 hours

Fast-setting adhesive laid floor tiles

4–6 hours

Thick-bed (traditional) laid floor tiles

8–10 days

Normal-setting adhesive laid wall tiles

4–6 hours

Fast-setting adhesive laid wall tiles

2 hours

Applied Product Ready for Use

Use

Waiting time

Walkability

24–36 hours

Full traffic

~7 days

Water immersion

~7 days

Values obtained at laboratory conditions: 23 °C ± 2 °C, R.H. 50 % ± 5 %. Higher temperatures reduce the indicated waiting time, lower temperature increase them.

APPLICATION INSTRUCTIONS

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.

MIXING

SikaCeram® StarGrout is a reactive product. This means that it sets through a chemical reaction between the two components A and B. It is therefore crucial to ensure that these components are thoroughly mixed with the correct mixing ratio. Pour all the hardener (Comp. B) into the container of the paste (Comp. A) and mix with an electric low speed (~500 rpm.) drill mixer equipped with a suitable mixing spiral. Mix thoroughly until the material is fully homogeneous and lump free. The finished mix has a very creamy consistency, is uniformly coloured and it is easy to apply and spread. For glittered finishing add the glitters to the mixed paste and mix until homogeneously dispersed.

APPLICATION

Tile Grout

- SikaCeram® StarGrout 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 product starts to set, it is possible to begin the cleaning step. Squeeze a sponge soaked in water over the grouted surface and emulsify the product by performing circular movements, taking care not to damage the joint.
- Frequently rinse the sponge with fresh water during the cleaning operation.
- After cleaning, carefully check if the tiles are completely free from any traces of the grout. Once hardened, the product can only be mechanically removed.

Tile Adhesive

- SikaCeram® StarGrout is applied using a 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 and thus optimum bond.
- If a film is seen to form on the surface, the adhesive has been left for too long; should this happen, then immediately remove the adhesive layer with the

trowel, discard this material and apply a fresh layer of SikaCeram® StarGrout adhesive.

- Avoid application in direct sunlight and/or strong wind / draughts.
- To lay any tiles larger than 900 cm² (e.g. 30×30 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 TOOLS

Thoroughly clean all tools and equipment with clean water before the product has set, preferably immediately after use. Once hardened the product can only be removed by mechanical means.

LIMITATIONS

- Always perform a test on cleanability and staining before grouting natural stone or any type of cladding with absorbent or porous surface.
 - Use a soft felt to emulsify the product while cleaning in case tiles with structured surface.
 - Always perform a preliminary test on cleanability if applying on tiles in colour contrast.
 - Do not add anything to the product that is not specified in this Product Data Sheet.
- SikaCeram® StarGrout must not be applied on the following situations:
- For any applications not explicitly described in this Product Data Sheet.

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

ECOLOGY

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 containing physical, ecological, toxicological and other safety-related data.

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, sub-

strates 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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