

PRODUCT DATA SHEET

SikaCeram[®]-230 Mosaic

Tile adhesive for glass mosaic

DESCRIPTION

SikaCeram[®]-230 Mosaic is a cement-based, improved, ultra-white, self-grouting powder adhesive, intended to lay glass mosaic. It can be used in layers up to 4 mm thick. SikaCeram[®]-230 Mosaic is suitable for setting all types of ceramic tiles on both walls and floors inside and outside for residential and medium loaded areas. Classified C2 TE according to EN 12004.

USES

SikaCeram[®]-230 Mosaic is suitable for bonding the following types of tiles:

- Glass, Ceramic and Marble made mosaic
- All kinds of ceramic tiles

SikaCeram[®]-230 Mosaic can be used indoors and outdoors, on floors and walls on the following substrate surfaces:

- Cement based substrates
- For overlaying existing sound ceramic tiles

SikaCeram[®]-230 Mosaic is suitable for applications demanding high performance, such as:

- Swimming pools
- Balconies and terraces

CHARACTERISTICS / ADVANTAGES

- No vertical slipping
- Extended open time
- Self-grouting
- Excellent workability

PRODUCT INFORMATION

Product Declaration	C2TE	(EN 12004)
Chemical Base	Portland cements, selected aggregates, water retention additives, re-dispersible polymer	
Packaging	5 kg and 20kg bag	
Shelf Life	12 months from date of production	
Storage Conditions	Undamaged original sealed packaging, in dry cooled conditions.	
Appearance / Colour	White or Grey powder	
Maximum Grain Size	Dmax: 0.5 mm	

TECHNICAL INFORMATION

Tensile Adhesion Strength	Initial	≥ 1.0 N/mm ²	(EN 1348)
	Water immersion	≥ 1.0 N/mm ²	
	Heat ageing	≥ 1.0 N/mm ²	
	Freeze-thaw cycles	≥ 1.0 N/mm ²	
Slip Resistance	≤ 0.5 mm		(EN 1308)

SYSTEM INFORMATION

System Structure

For the following substrates, a primer must be used:

Substrate	Primer
Gypsum plaster or anhydrite screed	SikaCeram® Primer ZA

Application and consumption details of the primers are given in their respective Product Data Sheet.

APPLICATION INFORMATION

Mixing Ratio	1.65 litres of water per 5 kg bag 6.6 litres of water per 20kg bag 33 % ± 1 %															
Fresh mortar density	~1.55 kg/l															
Consumption	Consumption is always dependent on the substrate surface profile and roughness, as well as on the application technique (single adhesive layer on the substrate, or with an additional 'buttering' layer on the back of the tiles. As a guide: <table><thead><tr><th>Size</th><th>Suggested trowel size</th><th>Consumption</th></tr></thead><tbody><tr><td>Glass</td><td>3 mm</td><td>~2 kg/m²</td></tr><tr><td>Small</td><td>6 mm</td><td>~2.5 kg/m²</td></tr><tr><td>Medium</td><td>8 mm</td><td>~3.5 kg/m²</td></tr><tr><td>Large</td><td>10 mm</td><td>~6 kg/m²</td></tr></tbody></table>	Size	Suggested trowel size	Consumption	Glass	3 mm	~2 kg/m ²	Small	6 mm	~2.5 kg/m ²	Medium	8 mm	~3.5 kg/m ²	Large	10 mm	~6 kg/m ²
Size	Suggested trowel size	Consumption														
Glass	3 mm	~2 kg/m ²														
Small	6 mm	~2.5 kg/m ²														
Medium	8 mm	~3.5 kg/m ²														
Large	10 mm	~6 kg/m ²														
Layer Thickness	4 mm max.															
Ambient Air Temperature	+5 °C min. / +35 °C max.															
Substrate Temperature	+5 °C min. / +35 °C max.															
Maturing time	~3 min															
Pot Life	~6 hours															
Open Time	≥ 0.5 N/mm ² after 30 min	(EN 1346)														
Curing Time	24–36 hours															
Adjustability Time	~50 min															
Applied Product Ready for Use	<table><thead><tr><th>Use</th><th>Waiting time</th></tr></thead><tbody><tr><td>Grouting on floors / walkability</td><td>24–36 hours</td></tr><tr><td>Grouting on walls</td><td>4–6 hours</td></tr><tr><td>Full surface traffic / use</td><td>~14 days</td></tr><tr><td>Water filling</td><td>~21 days</td></tr></tbody></table> <p>Values determined at laboratory conditions: 23 °C ± 2 °C, R.H. 50 % ± 5 %. Higher temperatures will reduce the indicated waiting time, lower temperature increase them.</p>	Use	Waiting time	Grouting on floors / walkability	24–36 hours	Grouting on walls	4–6 hours	Full surface traffic / use	~14 days	Water filling	~21 days					
Use	Waiting time															
Grouting on floors / walkability	24–36 hours															
Grouting on walls	4–6 hours															
Full surface traffic / use	~14 days															
Water filling	~21 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.

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 QUALITY / PRE-TREATMENT

- Substrates must be properly cured, structurally sound, free of any loose or friable particles, clean, dry and free of any contaminants such as dust, dirt, oil, grease, cement laitance or efflorescence.
- Depending on the substrate condition and contaminants to be removed from the surface, perform adequate preparation techniques, such as water-jet washing or blastcleaning, in order to remove all traces of any materials that could reduce the product's adhesion to the substrate.
- Any small surface defects and variations in level, profile, or around exposed aggregates for example, can be prefilled and levelled with an additional layer of SikaCeram®-230 Mosaic, to a maximum thickness of 4 mm, applied at least 24 h before the ceramic tiling is laid. For larger and thicker areas of surface reprofiling and making good, appropriate mortars from the Sika MonoTop® or Sikafloor® Level range should be used. Cracks in substrates must be identified and sealed appropriately e.g. with Sikadur epoxy resins.
- When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc., check to confirm that these surfaces are all firmly and securely bonded and stable, then use suitable degreasing/descaling products to thoroughly and completely clean the surface.
- For applications in hot climates / environments and / 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).
- For tiling in frequently damp or wet rooms, then a suitable Sika® waterproofing product / system should be applied before the tiling.

MIXING

Pour the recommended amount of water into a suitable, clean mixing container. Whilst stirring slowly, slowly add the SikaCeram®-230 Mosaic powder to the water and then mix thoroughly using a low speed (~500 rpm) electric mixer until a completely homogeneous and lump-free mix is achieved.

After mixing, leave the material to stand and 'mature' for a few minutes, and then briefly stir again immediately prior to application. The resulting mix has a very creamy consistency and is easy to apply and spread.

APPLICATION

- SikaCeram®-230 Mosaic is applied using a notched trowel.
- Apply sufficient product to ensure complete 'wetting' of the back of the tiles.
- Tiling must to be carried out on freshly applied adhesive, applying 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 trowels, discard this material and apply a fresh layer of SikaCeram®-230 Mosaic adhesive.
- Avoid application in direct sunlight and/or strong wind / draughts.
- To lay glass mosaic on net backing, dilute SikaCeram® Improver with water in 1:1 ratio. Blend SikaCeram®-230 Mosaic with the mixture obtained. The resulting product provides an extremely tenacious bond and is highly flexible while maintaining the creamy consistency obtained when only water is used for mixing.
- The use of the product to lay not-absorbing tiles of maximum size up to 2025 cm² (e.g. 45x45 cm) indoors, and 900 cm² (e.g. 30x30 cm) for outdoor is preferable. These limits are valid for cementitious, non-heating substrates.
- To lay tiles larger than 900 cm² (e.g. 30x30 cm), the double-spreading (buttering) method of application is always recommended.

CLEANING OF TOOLS

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

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 South Africa (Pty) Ltd

9 Hocking Place,
Westmead, 3608
South Africa
Phone +27 31 792 6500
www.sika.co.za



Product Data Sheet
SikaCeram®-230 Mosaic
November 2022, Version 05.01
021710102000000121

SikaCeram-230Mosaic-en-ZA-(11-2022)-5-1.pdf