

PRODUCT DATA SHEET

SikaTile®-440 Opti-Cure

A RAPID SETTING TILE AND STONE ADHESIVE WITH PATENTED DUST LESS® TECHNOLOGY

DESCRIPTION

- SikaTile®-440 Opti-Cure is a multi-purpose rapid setting cement-based tile and stone adhesives with patented DUST LESS® technology which reduces airborne dust in the mixing phase by up to 80%, improving air quality, less mess and faster clean up.
- SikaTile®-440 Opti-Cure rapid setting formulation is suitable for grouting and light foot traffic after 2-3 hours (timing impacted by climate and environment).
- SikaTile®-440 Opti-Cure unique formulation is suitable for laying most types of tiles, natural stone, agglomerates, terrazzo, and man made stone.
- SikaTile®-440 Opti-Cure is exceptionally smooth and creamy to spread with high performance non slump capabilities for large format tile and stone applications

USES

SikaTile®-440 Opti-Cure can be used for thin-bed tile and stone applications and medium-bed applications up to 10mm bed thickness.

SikaTile®-440 Opti-Cure is suitable for wall and floor applications both internal and externally.

Suitable tile types include.

- Ceramic and porcelain tiles.
- Glass tiles and mosaics
- Natural Stone* including marble, granite, limestone, basalt etc
- Agglomerates*, terrazzo* and man made stone*
- Class A & B tested stone* in accordance with EN14617-12

*Sika recommends conducting a site test to evaluate compatibility of the stone with the adhesive due to influences beyond Sika's control.

Suitable substrates include:

- Concrete
 - Cement-based screeds and renders
 - Compressed cement boards*
 - Cement sheeting*/Ceramic Tile underlay*
 - Existing tiles with SikaTile 015 Prep n Prime
 - Light weight construction boards suitable for tiling applications*
 - Suitable Sika under tile waterproofing membranes
 - Under tile heating systems
 - Gypsum plasterboard (internal only)
 - Sika approved acoustic underlayments
- *refer to board manufacture instructions for further details and load limits.

FEATURES

- Rapid setting, ready for grouting and light foot traffic after 2-3 hours.
- Patented DUST LESS® Technology that reduces airborne dust in the mixing phase by up to 80%
- C2TFS1 flexible performance
- Smooth creaming formulation for ease application
- Suitable for early aged screeds
- Exceptional non slump properties making it suitable for fixing large format tile and stone.
- Low VOC

PRODUCT INFORMATION

Product declaration	C2TFS1 as per AS ISO 13007.
Packaging	20kg Bags
Shelf life	9 months from date of manufacture if unopened.
Storage conditions	Store in dry, cool conditions, out of direct sunlight. High humidity will reduce shelf life.
Appearance and colour	white to cream colour

APPLICATION INFORMATION

Consumption	Notched Troewl Size	Approximate coverage
	6mm	8-9m ²
	10mm	5-6m ²
▪ Consumption is dependent on substrate surface profile, and application technique use chart as a guide only.		
Mixing ratio	5 - 5.5 litres of water per 20kg bag	
Pot Life	45 minutes at 23°C & 50% relative humidity. Restirring the adhesive during its pot life may be required.	
Open Time	20 minutes, at 23°C & 50% relative humidity. Measured in laboratory conditions.	
Applied product ready for use	USE	WAIT TIME
	Grouting or foot traffic	2-4 hours
	Return to wet area service	24 hours
▪ Values determined at laboratory conditions 23°C & 50% RH. Higher temperatures will reduce times and lower temperatures will increase times.		

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.

LIMITATIONS OF USE

- SikaTile® 440 Opti-Cure is not suitable for use over timber or particle board substrates, over sheet with a suitable tile underlays or install a reinforce screed.
- Not suitable for use over solvent based coating or waterproofing membranes.
- The performance of cement based materials will be compromised when used below 5°C and above 35°C.
- It is recommended in hot climates to regularly clean mixing pails in between adhesive mixes and to ensure cool or cold water is used when mixing the adhesive to maximise potlife and open time.
- It is recommended to conduct a test sample for compatibility when fixing tile and stone subject to moisture or dimensional stability.
- Not suitable for direct fixing of resin back tile and stone, prime the resin with SikaTile 015 Prep n Prime first and allow to dry prior to fixing with SikaTile®-440 Opti-Cure.
- Do not use with tiles and stone subject to moisture

or dimensionally stability over early aged screeds or early aged concrete.

ECOLOGY, HEALTH AND SAFETY

Please refer to the latest edition of the Material Safety Datasheet for safe handling requirements.

APPLICATION INSTRUCTIONS

EQUIPMENT

- Clean mixing buckets
- Mixing drill with stirrer attachment
- Notched trowels

SUBSTRATE QUALITY

- Substrate deflection: all substrates under loads must not exceed L/360 for tile & L/720 for stone applications.
- Substrates must be properly cured, structurally sound, free from friable particles, clean, dry, and free from contaminants such as dirt, dust, oil, curing compounds, laitance or efflorescence.
- Dependant on the substrate condition and contamination to be removed from the surface, perform adequate preparation techniques such as water blasting, scarification etc to remove all traces of contaminants.

- For tiling wet areas, a suitable Sika approved waterproof membrane shall be used prior to tiling and allow to dry prior to application.

Concrete Floors: Allow 28 days for concrete to cure.

Concrete shall be left with an open surface - steel trowel finishes are generally acceptable if they accept water. Remove all traces of curing compound, surface sealers, dirt, oil, and any other contaminate that may inhibit the adhesion.

Cement-based Screeds: Must be installed as per AS 3958 The installation of ceramic and stone tiles

Sheeted substrates: All boards / underlays must be installed as per the manufacturer's instructions and specifically designed for tiling.

SUBSTRATE PREPARATION

All substrates shall be primed with a suitable Sika primer.

Do not prime over waterproofing membranes, apply the adhesive directly over the membrane.

Porous substrates: SikaTile 010 Secure Prime

Non porous substrates: SikaTile 015 Prep n Prime.

Refer to specific instructions on primer product data-sheets.

MIXING

Pour cool clean water into a clean mixing pail before slowly adding the adhesive powder. Mix with a mixing drill with stirrer attachment for approximately 2-3 minutes to achieve a smooth lump free homogenous mixture. Allow the mixture to stand for 2 minutes then restir for an additional minute without adding any water. Restirring the mixture may be necessary during the pot life of the adhesive.

APPLICATION

- All tiles and stone shall be fixed in accordance with relevant AS 3958 The installation of ceramic and stone tiles.
- Ensure the backs of tiles are clean and free from dust and contaminants prior to laying.
- Apply the adhesive to the substrate with the appropriately sized notched trowel to achieve minimum coverage requirements.
- Ensure large tiles and all stone are back-buttered with the adhesive to ensure full coverage is achieved in accordance with AS3958.
- Apply the adhesive in a single direction. While pressing the tile or stone into the wet adhesive, break the ridges with the tile to fully bed the tile into the adhesive.
- Allow adhesive to dry and set prior to grouting.
- It is advisable to periodically check the backs of tiles to ensure adequate coverage is achieved in accordance with the standards.

Sika Australia Pty Limited

ABN 12 001 342 329

aus.sika.com

Tel: 1300 22 33 48

CLEANING OF EQUIPMENT

Tools and equipment can be cleaned with water while the adhesive is still wet.

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.

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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