

PRODUCT DATA SHEET

Sika® Ucrete® UL

(formerly Ucrete® UL)

Heavy-duty, cementitious, underlayment screed for Sika® Ucrete® flooring systems

PRODUCT DESCRIPTION

Sika® Ucrete® UL is a one-part, fast-curing, shrinkage compensated underlayment screed for use beneath Sika® Ucrete® flooring systems. It is a ready-to-use material that contains special hydraulic binders, well-graded sands and specifically selected polymers. Depending on the mixing water addition, the consistency of the mortar can be adjusted to provide a thixotropic material for application to falls or a fluid material for levelling or pumping.

USES

Sika® Ucrete® UL is used as an underlayment screed for Sika® Ucrete® flooring systems.

Please note:

- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Fast curing and fast strength-development at low temperature allows for early preparation and application of Sika® Ucrete® flooring after 16 hours at +10 °C
- Very good resistance to thermal shock when used as part of a Sika® Ucrete® flooring system
- Very good workability and finishing in all consistencies
- Easy to apply and lay as a monolithic flat floor finish or on a slope
- Low shrinkage, reducing stress on the substrate and reducing the risk of cracking
- Pre-batched, one-part mortar that only needs the addition of water
- Suitable for internal or external application, on all horizontal surfaces, in dry and wet environments
- Layer thickness of 10–100 mm

PRODUCT INFORMATION

Chemical Base	Special cements
Packaging	20 kg Refer to the current price list for available packaging variations.
Colour	Grey
Shelf Life	9 months from date of production
Storage Conditions	The Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.
Maximum Grain Size	Maximum diameter: 2 mm

TECHNICAL INFORMATION

Compressive Strength	Conditioned 24 h at +5 °C	≥ 45 N/mm ²	(EN 13892-2)
	Conditioned 24 h at +23 °C	≥ 50 N/mm ²	
	Conditioned 72 h at +5 °C	≥ 55 N/mm ²	
	Conditioned 72 h at +23 °C	≥ 60 N/mm ²	
	Conditioned 28 d at +23 °C	≥ 70 N/mm ²	
	Conditioned 28 d at +23 °C	≥ 80 N/mm ²	
Flexural Strength	Conditioned 24 h at +23 °C	≥ 7.0 N/mm ²	(EN 13892-2)
	Conditioned 72 h at +23 °C	≥ 7.5 N/mm ²	
	Conditioned 7 d at +23 °C	≥ 9.0 N/mm ²	
	Conditioned 28 d at +23 °C	≥ 10.0 N/mm ²	
Tensile adhesion strength	≥ 3.0 N/mm ²		(EN 1542)
Reaction to Fire	Class A1 _{fl}		(EN 13501-1)
Capillary Absorption	≤ 0.5 kg/m ² /h ^½		(EN 13057)

APPLICATION INFORMATION

Fresh mortar density	2.2 kg/L		(EN 1015-6)
Consumption	2.2 kg/m ² per mm of thickness. Approximately 2000 kg per 1 m ³ of fresh mortar. Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Yield	10.5 L Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Layer Thickness	Maximum	100 mm	
	Minimum	10 mm	
Product Temperature	Maximum	+30 °C	
	Minimum	+5 °C	
Ambient Air Temperature	Maximum	+30 °C	
	Minimum	+5 °C	
Mixing Ratio	Bonding slurry	2.6–2.9 L	
	Pourable consistency	2.5–2.9 L	
	Thixotropic consistency	1.9–2.1 L	
Substrate Temperature	Maximum	+30 °C	
	Minimum	+5 °C	
Waiting Time / Overcoating	Temperature	Waiting time	
	+10 °C	16 hours	
Note: Times are approximate and will be affected by changing ambient and substrate conditions.			

VALUE BASE

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

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

IMPORTANT

Surface defects due to voids in the substrate

Voids and blow holes in the substrate will weaken the surface and damage the covering Product if not repaired during the preparation process.

1. Fully expose blow holes and voids during surface preparation to identify the required repairs.

TREATMENT OF JOINTS AND CRACKS

Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

1. Remove weak cementitious substrates.
2. **IMPORTANT** The final texture of the substrate must be open-textured and gripping. Prepare cementitious substrates mechanically using abrasive blast cleaning, planing or scarifying equipment to remove cement laitance.
3. Before applying the Product, remove all dust, loose and friable material from the application surface with an industrial vacuuming equipment.
4. Bring edge and movement joints through the floor surface. Note Protect the joints so the Product cannot flow into them.
5. To prevent the Product from bonding, install isolating strips to vertical perimeter surfaces such as pipes, ducts, conduits, walls, columns.
6. Prewet the prepared cementitious substrate for at least 2 hours before application. Note Before starting the bonding slurry application, the surface must be mat-damp, but without standing water.

For additional information on products for leveling and repairing defects, contact Sika® Technical Services.

MIXING

SMALL TO MEDIUM VOLUMES

1. Pour the minimum recommended clean water quantity into a suitable mixing container.
2. While stirring slowly with electric paddle mixer, add the powder to the water and mix thoroughly for at least for 3 minutes.
3. Additional water can be added up to the maximum specified amount to adjust the consistency to achieve a smooth consistent mix.
4. Check the consistency after every mix.

LARGE VOLUMES

1. Pour the minimum recommended clean water quantity into the forced action mixer or rotating pan or continuous mortar mixer and integral delivery pump.
2. Add the powder to the water and mix thoroughly for at least for 3 minutes to achieve a smooth consistent mix.
3. Check the consistency and record results in a jobsite quality control plan.
4. Compare mixing consistency with drill and mixing paddle technique.

APPLICATION

BONDING SLURRY FOR PRIMING

1. Apply the Product to the prepared substrate and work in thoroughly using a hard bristle broom. Ensure the entire surface is fully covered.
2. Do not allow the bonding slurry to dry. Apply the subsequent thixotropic or levelling layer wet-on-wet.

THIXOTROPIC FOR APPLICATION TO FALLS

1. Apply the Product to the bonding slurry and spread to the required thickness with a trowel.
2. Compact the mortar using a vibrating tamper or trowel.
3. Go over the surface with a levelling board and rub down with a wooden board.
4. Smooth surface with a finishing trowel if necessary.

FLUID FOR LEVELLING OR PUMPING

1. Pour or pump the Product onto the wet bonding slurry.
2. Spread the material to the desired thickness.
3. Smooth surface with a finishing trowel if necessary.

CURING TREATMENT

Freshly applied Sika® Ucrete® UL must be protected for approximately 6 hours against rapid drying in hot weather, strong wind or if used outdoors. Surface preparation and application of the following Sika® Ucrete® layers is possible after 16 hours at +10 °C, in most cases.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material 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.

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Product Data Sheet

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