

PRODUCT DATA SHEET

Sika® Ucrete® PLC

(formerly Ucrete® PLC)

Scratch coat Primer for Sika® Ucrete® Flooring Systems

PRODUCT DESCRIPTION

Sika® Ucrete® PLC is a scratch coat primer applied by trowel at a thickness of 0.5 to 3mm. Sika® Ucrete® PLC is not a finished floor and must be overlaid by the appropriate Sika® Ucrete® floor finish.

USES

- Sika® Ucrete® PLC is applied as a scratch coat to prepared concrete substrates to completely seal the substrate prior to overlaying with Sika® Ucrete® industrial flooring. Sika® Ucrete® PLC fills in anchor grooves and provides a smooth even substrate.

CHARACTERISTICS / ADVANTAGES

- Excellent air quality.
- Suitable for application on to 7day old concrete and 3day old polymer screeds.
- Allows application of suitable Ucrete flooring systems after approximately 8 hours at 20°C.
- High temperature resistance for floors in extreme environments.

APPROVALS / STANDARDS

GB/T 22374-2018

PRODUCT INFORMATION

Chemical Base	Waterborne polyurethane	
Packaging	Part 1	2.67 kg/pail
	Part 2	2.86 kg/pail
	Part 3	14.6 kg/bag
	Part 1+2+3	20.13 kg
Shelf Life	Part 1	9 months
	Part 2	12 months
	Part 3	9 months
	Part 4	24 months
Storage Conditions	In covered warehouse conditions, above 5°C and below 30°C and out of direct sunlight. Materials must be raised off the floor and kept dry. Liquid components must be protected from frost.	
Appearance / Colour	Greyish white	
Density	Mixture: ~2.0 kg/L	
Volatile organic compound (VOC) content	≤ 50g/L	

TECHNICAL INFORMATION

Tensile adhesion strength	≥ 2.0 MPa (failure in concrete)
Resistance to Alkalinity	Saturated Ca(OH) ₂ for 48h

SYSTEM INFORMATION

Systems	Coating System	Product
	Primer	Sika® Ucrete® PLC
	Topcoat	Sika® Ucrete® Industrial Flooring

APPLICATION INFORMATION

Mixing Ratio	Parts 1:2:3 = Mix full units only.									
Consumption	2 kg/mm/m ² 2-4 kg/m ² 5 - 10 m ² / unit Note: These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.									
Product Temperature	+10 °C min./+30°C max. Optimal material temperature range : 15°C - 25°C									
Ambient Air Temperature	+10 °C min./+30°C max. Optimal ambient air temperature range : 15°C - 25°C									
Relative Air Humidity	80% r.h. max.									
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3°C above the dew point to reduce the risk of condensation or blooming on the floor finish.									
Substrate Temperature	+10 °C min./+30°C max. Optimal substrate temperature range : 15°C - 25°C									
Substrate Moisture Content	≤ 8% pbw moisture content. Test method: Sika®-Tramex meter or CM - measurement. No rising moisture according to ASTM (Polyethylene-sheet).									
Waiting Time / Overcoating	Before applying Sika® Ucrete® Industrial Flooring on Sika® Ucrete® PLC allow: <table border="1"> <thead> <tr> <th>Substrate temperature</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>+10°C</td> <td>16h</td> <td>*</td> </tr> <tr> <td>+20°C</td> <td>8h</td> <td>*</td> </tr> </tbody> </table> <p>Note: Times are approximate and will be affected by changing ambient condition.</p>	Substrate temperature	Minimum	Maximum	+10°C	16h	*	+20°C	8h	*
Substrate temperature	Minimum	Maximum								
+10°C	16h	*								
+20°C	8h	*								

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.

LIMITATIONS

- Substrates will normally be concrete or polymer modified screeds, but some other types of substrates may be suitable, please consult your Sika sales representative or technician for details.
- If you are unsure of the surface type or quality of the substrate, please test some samples in small area first.
- The optimum temperature for the material and the environment is 15-25°C. If the actual substrate or ambient temperature is below 15°C, consult Sika's sales or technician for precautions before applying the material, and take warming measures such as air-conditioning if necessary, or defects may result.
- This product should not be applied to vertical or suspended surfaces. For application to vertical surfaces, refer to other suitable products such as Sika® Ucrete® RG.
- Due to thermal shock, the use of steam cleaning may cause the floor to delaminate. For floors requiring steam cleaning, please use other suitable products such as Sika® Ucrete® UD 200.
- Due to the fact that the material is produced in batches, it is not possible to guarantee complete col-

our consistency. Therefore when using Sika® Ucrete® products, please do not mix different batch numbers in the same area.

ECOLOGY, HEALTH AND SAFETY

APPLICATION INSTRUCTIONS

EQUIPMENT

Sika® Ucrete® PLC must be thoroughly mixed using a low speed electric stirrer (400 -600rpm) or other suitable equipment.

SUBSTRATE QUALITY / PRE-TREATMENT

- The base concrete must be of sufficient strength (compressive strength of at least 25 N/mm² and tensile strength of at least 1.5 N/mm²).
- The concrete surface must be treated by mechanical means such as sandblasting, shotblasting and grinding to thoroughly remove cement floats, oil contamination and loose concrete of insufficient strength and to expose holes, while obtaining substrate with good surface strength and roughness (longitudinally open textured surface).
- Holes and cracks in the concrete surface must be repaired and filled with suitable Sika specialised systems such as Sika® Ucrete®, Sikafloor®, Sikadur® and Sikagard® first.
- If the substrate is uneven, it needs to be levelled with Sika's special levelling mortar to obtain a more even and aesthetic appearance.
- All dust, particles and rubbish on the surface of the substrate must be cleaned up by vacuuming etc before application.
- Anchor grooves - All free edges of Sika® Ucrete® floors (including perimeters, trenches or drains) need to be provided with additional cutting gap in order to distribute the mechanical and thermal stresses. To achieve stress dispersion, formed or cut grooves can be placed in the concrete. The depth and width of the grooves should be twice the thickness of the Sika® Ucrete® floor system. Additional information on the edges can be found in the additional material supplied. If necessary, all free edges can be protected with mechanically installed metal strips, additionally thin edges must not be used as anchoring grooves.
- Expansion joints - Expansion joints are provided at the intersection of different materials on the base. Separate zones according to thermal stresses, vibrations and surrounding load-bearing columns, see additional details.

MIXING

- Temperature will affect the mixing effect; the optimal temperature of the material itself before use is 15°C-25°C; if the application is in low temperature in winter, it is recommended to store the material in an indoor air-conditioned room at 15°C-25°C for at least 24h before use.
- Prepare the mixing container in advance; start the mixer: pour in Part 1 and stir for 15 seconds, then add Part 2 and stir for 20 seconds. Then slowly pour

in Part 3 (powder) while stirring, the addition process takes about 15 seconds. Note that it should not be poured into the mixer quickly. After adding Part 3, stir further for more than 2 minutes to ensure that all powders and base materials are completely mixed.

- The mixing time should be consistent for each group of materials.
- During mixing, it is also necessary to use a straight-sided trowel to scrape off the ingredients (Part 1+2+3) that are stained on the sides and bottom of the container. This operation should be performed at least once to ensure complete final mixing. It is only necessary to mix all the ingredients in the factory package.

APPLICATION

- Primer: Pour the mixed material immediately onto the floor and apply by steel trowel, working it well into the substrate in both directions to completely seal the floor. Fill in anchor grooves and finish to provide a continuous smooth even surface.
- Topcoat: Refer to the relevant PDS for application details and precautions.

Applicators must guarantee enough workers in large-area application. The entire process must be compact, and the transport of material between two mixing must be quick and ensure a wet joint, otherwise lap marks and color difference may occur.

CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

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.

SIKA LIMITED

Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited



Product Data Sheet
Sika® Ucrete® PLC
June 2024, Version 01.01
02081400000002022

SikaUcretePLC-en-GB-(06-2024)-1-1.pdf

