BUILDING TRUST

PRODUCT DATA SHEET

Sika® Ucrete® MF 40 AS

(formerly Ucrete® MF 40 AS)

Antistatic, smooth heavy-duty polyurethane flooring screed

PRODUCT DESCRIPTION

Sika® Ucrete® MF 40 AS is a heavy-duty resin floor which provides a smooth protective antistatic floor finish suitable for applications in predominantly dry ESD and ECF environments.

USES

Sika® Ucrete® MF 40 AS is used in the electronics industry to protect sensitive electronic devices and in explosion hazarded areas.
Sika® Ucrete® MF 40 AS is used within dry process areas including the following application areas:

- Food and beverage facilities
- Pharmaceutical facilities
- Chemical and processing facilities
- Clean rooms
- Electronic facilities and data centres
- Defence estates

Please note:

- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Expert installation by fully trained and licensed applicators
- Resistant to bacterial or mould growth
- Suitable for application on to 7-day-old concrete and 3-day-old polymer screed
- Electrostatically conductive
- Very good resistance to specific chemicals
- Very good mechanical resistance
- Impermeable to liquids
- Non-tainting after curing
- Odourless
- Thermal expansion properties similar to concrete
- Tolerant to substrates with high moisture content

APPROVALS / STANDARDS

- Food and Beverage Facilities Suitability, Sika® Ucrete®, HACCP, Test Report No. I-PE-769-SA-2-RG-06b
- Halal Certification Europe (HCE), Sika® Ucrete®, WHFC, Certificate No. 21453-2/1/1/Y1
- Indoor Air Comfort Gold EN 16516, Sika® Ucrete®, eurofins, Certificate No. IACG-321-01-01-2023

PRODUCT INFORMATION

Chemical Base	Water-based polyurethane cement hybrid
Packaging	Refer to the current price list for available packaging variations.
Shelf Life	Always refer to the best-before date of the individual packaging.
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.

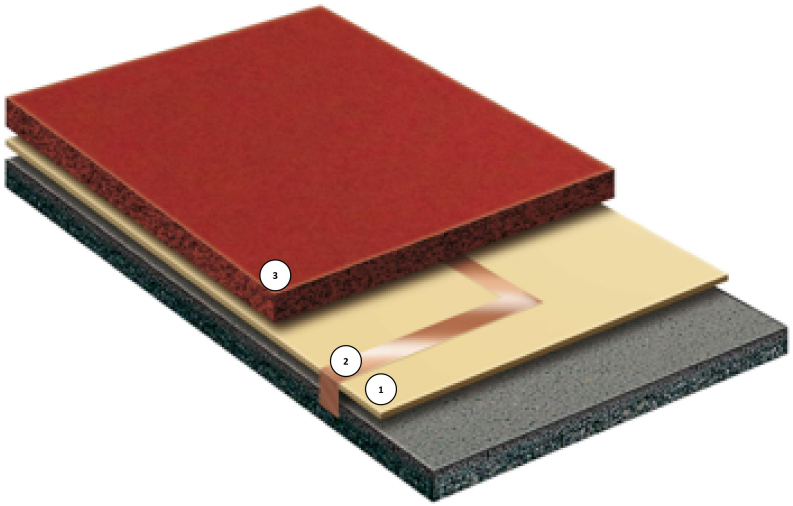
Colour	Cured colour	Red, Orange, Yellow, Bright Yellow, Cream, Grey, Light Grey, Green, Light Green, Green/ Brown, Blue.	
Density	Mixed Product	~1.97 kg/l	(EN ISO 2811-1)

TECHNICAL INFORMATION

Compressive Strength	Cured 28 days at +23 °C	50 N/mm²	(EN 13892-2)
Modulus of Elasticity in Compression	4000 MPa		(EN 12447)
Flexural Strength	Cured 28 days at +23 °C	20 N/mm²	(EN 13892-2)
Tensile Strength	Cured for 28 days at +20 °C	9 MPa	(BS 6319-7)
Tensile adhesion strength	> 2.0 N/mm² (concrete failure)		(EN 1542)
Coefficient of Thermal Expansion	3.6×10^{-5} °C^{-1}		(ASTM C531)
Skid / Slip Resistance	PTV, slider 96	35 wet conditions	(EN 13036-4)
	Class	R 10	(DIN 51130)
Electrostatic Behaviour	Resistance to ground	$R_G < 1 \times 10^6$ Ω	(EN 1081)
	Resistance to ground	$R_G < 10^9$ Ω	(IEC 61340-4-1)
	Body voltage generation	< 100 V	(IEC 61340-4-5)
	Resistance of person to earth	< 35 MΩ	(IEC 61340-4-5)
	Note: Measurement results can be affected by ESD clothing, ambient conditions, measurement equipment, cleanliness of the floor and the test personnel.		
Service Temperature	Maximum	+70 °C	
	Minimum	-15 °C	
Water permeability	Sika® Ucrete® MF 40 AS exhibits zero absorption when tested to CP.BM2/67/2.		
Chemical Resistance	Laboratory-defined resistance to many individual chemicals. Before proceeding, contact Sika Technical Service for specific information.		
Reaction to Fire	Class B_{fl}-s1		(EN 13501-1)

SYSTEM INFORMATION

System Structure



	Layer	Product
1.	Primer	Sika® Ucrete® PLC
2.	Earthing connection	Copper tape
3.	Wearing layer	Sika® Ucrete® MF 40 AS

APPLICATION INFORMATION

Consumption

Layer	Product	Consumption
Primer	Sika® Ucrete® PLC	2–3 kg/m²
Earthing connection	Copper tape	Maximum distance 10 m between strips
Wearing layer	Sika® Ucrete® MF 40 AS	8–10 kg/m² for 4 mm 12–14 kg/m² for 6 mm

Layer Thickness

~4–6 mm

Product Temperature

Maximum	+25 °C
Minimum	+18 °C

Ambient Air Temperature

Maximum	+35 °C
Minimum	+18 °C

Substrate Temperature

Maximum	+30 °C
Minimum	+18 °C

Curing Time

Substrate temperature	Return to traffic
+18 °C	< 24 hours
+15 °C	4 hours (with Sika® Ucrete® Accelerator)

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.

Regulation (EC) No 1907/2006 (REACH) - Mandatory training

As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit www.sika.com/pu-training.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

IMPORTANT

Reduced service life due to incorrect treatment of cracks

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

1. For static cracks, ensure the width is suitable for overcoating with Sika® Ucrete® MF 40 AS.
2. For dynamic cracks, ensure the movement is within the movement capacity of Sika® Ucrete® MF 40 AS.

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.

The System can be applied on green or damp concrete with no standing water. Allow for at least 3 days for early concrete shrinkage to occur to prevent shrinkage cracks from appearing on the wearing surface.

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 30 N/mm²) with a minimum tensile strength of 1.5 N/mm².

Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

APPLICATION

Application must be undertaken by a fully trained and licensed Sika® Ucrete® applicator.

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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