

Ucrete MF40AS-C

Static Conductive heavy duty polyurethane floor finish

DESCRIPTION

Ucrete MF40AS-C is a unique HD Polyurethane resin floor which provides a smooth protective static conductive floor finish suitable for applications in predominantly dry environments.

Ucrete MF40AS-C is used where there is a very high risk of explosion due to electrostatic discharge including where explosives, gases or solvents are handled.

Ucrete Industrial Flooring has been widely used throughout industry for more than 50 years; many of the older floors are still in service. A detailed project reference list is available upon request

PERFORMANCE DATA

ANTISTATIC PROPERTIES

Ucrete MF40AS-C meets the requirements of BS5958, EN1081, DIN51953, EN61340 and BS2050.

For more detailed information on earthing anti-static floors refer to the separate datasheet 'Guidelines to Earthing of Ucrete antistatic floors'.

Ucrete MF40AS-C is ideally suited for defence estates and very highly explosive product facilities. It does not contain any amines and is non-sparking according to UFGS-09 97 23 (April 2006).

AIR QUALITY

Ucrete has been awarded the Indoor Air Comfort Gold Label following extensive VOC emission chamber testing and auditing of quality management and production control procedures.

This demonstrates that Ucrete is an extremely clean product without any volatile compounds that might taint foodstuff or affect the well-being of personnel.

All Ucrete grades give very low emissions and conform to all the emissions requirements for indoor flooring systems in Europe including AgBB in Germany, Afsset in France, where they are rated A+ for VOC emissions (the cleanest rating), and M1 in Finland.

For further information please contact your local BASF representative.

TEMPERATURE RESISTANCE

A Ucrete MF40AS-C floor is fully resistant to liquid spillage and discharge up to 70°C. Suitable for freezer temperatures down to -15°C.

CHEMICAL RESISTANCE

Ucrete MF40AS-C offers exceptional resistance to a wide range of chemical aggressors. For example Ucrete is resistant to spillages of the following commonly encountered classes of chemicals:

Most dilute and concentrated organic acids such as, Acetic Acid, Lactic Acid, Oleic Acid and Citric Acid as commonly found in the food industry,

Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric.

Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration

Animal fats and vegetable oils, sugars, flavourings and essences.

Mineral oils, kerosene, gasoline and brake fluids

A wide range of organic solvents including Methanol, Xylene Ethers and Chlorinated solvents

Note: some staining or discolouration may occur with some chemicals, depending upon the nature of the spillage and the standards of housekeeping employed.

Extensive chemical resistance tables are available in the separate data sheet 'A guide to the chemical resistance of Ucrete Flooring'.

For detailed information, please contact your local BASF Construction Chemicals office for guidance.

IMPACT RESISTANCE

With high mechanical strengths and a low elastic modulus, Ucrete MF40AS-C is very resilient and able to withstand severe impact loads. While no material is indestructible and surface chipping may occur, brittle modes of failure resulting in cracking and disbondment are unknown with Ucrete floors.

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SUBSTRATE MOISTURE TOLERANCE

Ucrete Industrial Flooring is extremely tolerant to residual substrate moisture and can be installed directly onto 7 day old concrete, or onto old good quality concretes with high moisture contents without the use of special primers, provided there is a functioning DPM within the structure.

This enables rapid construction programmes to be maintained and facilitates refurbishment work in wet process areas.

Epoxy surface DPMs should not be used as they soften under high temperature conditions and will lead to floor failure.

CLEANING & HYGIENE

Regular cleaning and maintenance will enhance the life and appearance of any floor. Ucrete MF40AS-C is readily cleaned with industry standard cleaning chemicals and equipment. Please consult your local cleaning chemical or equipment supplier.

Detailed cleaning guidelines are available from your local BASF Construction Chemicals office.

SLIP RESISTANCE

The Ucrete MF40AS-C floors have coefficient of friction as determined to EN13036 Part 4 with 4S rubber on the wet floor as follows:

Ucrete MF40AS-C 35

The Ucrete MF40AS-C surface profiles conform to DIN51130 as follows:

Ucrete MF40AS-C R10 V -

Optimum slip resistance can only be maintained with regular cleaning.

COLOURS

Ucrete MF40AS-C is available in eight standard colours:

Red	Yellow	Green	Orange
Grey	Blue	Green/Brown	Cream

Ucrete floor systems have been formulated to provide the very highest chemical and heat resistance. As a direct result, some yellowing of the installed floor will occur in areas of direct UV exposure. This is most apparent in lighter colours.

SPECIFICATION

The floor finish shall be Ucrete MF40AS-C from BASF plc, Construction Chemicals of 19 Broad Ground Road, Redditch, Worcestershire, B98 8YP, installed at 4 - 6mm in accordance with the manufacturer's instructions.

SUBSTRATE QUALITY

Concrete substrates should be visibly dry and have a minimum tensile strength of 1.5 MPa.

Refer to the guide 'The Design & Preparation of Substrates for Ucrete Industrial Flooring'

All joints in the substrate concrete subject to movement should be reflected through the Ucrete floor and sealed with a suitable sealant.

APPLICATION CONDITIONS

For best results materials, substrate and air temperature should be in the range 18 - 22°C. Whilst Ucrete MF40AS-C will cure out effectively over a wide range of temperatures the optimum appearance is most readily achieved under good site conditions

Low temperatures will retard the setting and can impair the visual appearance of the floor.

High temperatures will shorten the open time and can impair the appearance of the floor.

SYSTEM BUILD UP

PRIMER SC	at 0.3kg/m ²
Earthing tape*	at 5m centres, max 3m from floor surface to tape
PRIMER LCAS	minimum 1mm thick ≥ 3kg/m ²
Ucrete MF40AS	at 8 -10kg/m ²

*Earthing tape can be of either copper or stainless steel design. Please contact BASF plc, Construction Chemicals for more information.

CURING

Normally Ucrete MF40AS-C floors can be put into service within 24 hours

STORAGE

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.

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UCRETE LICENSED APPLICATORS

To achieve the best floor possible with a professional installation, you must use one of our fully trained Ucrete Licensed Applicators.

To view our most up to date Licenced Applicators please click here: <https://www.master-builders-solutions.basf.co.uk/en-gb/about-us/news/ucrete-licensed-applicators>

BIM OBJECTS

All Ucrete products have a dedicated BIM object available to download from the NBS National BIM Library, the industry source for generic and proprietary BIM content.

To view our most up to date Ucrete BIM Objects please click here: <https://www.nationalbimlibrary.com/en/basfplc-construction-chemicals/>

DISPOSAL

Part 2 containers should be decontaminated with 5% sodium carbonate (washing soda) solution after use and disposed of as building waste in accordance with local regulations.

WARNINGS AND PRECAUTIONS

In its cured state Ucrete is physiologically non-hazardous.

For normal flooring applications Ucrete does not require the use of respiratory protective equipment during installation.

Operatives should consult the CoSHH risk assessment and their work instructions.

HANDLING AND TRANSPORT

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat, smoke or drink while working and wash hands when taking a break or when the job is completed.

Specific safety information referring the handling and transport of this product can be found in the Material Safety Data Sheet. For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

Disposal of product and its container should be carried out according to the local legislation in force. Responsibility for this lies with the final owner of the product.

CONTACT DETAILS

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Product Data	
Density	1970 kg/m ³
Compressive strength (EN13892-2)	48 - 53 MPa
Tensile strength (BS6319 Part 7)	9 MPa
Flexural strength (EN13892-2)	18 - 21 MPa
Compressive modulus (BS 6319:Part 6)	3250 - 4000 MPa
Adhesive strength to concrete (EN13892-8)	concrete failure
Coefficient of thermal expansion (ASTM C531:Part 4.05)	$3.6 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$
Fire Testing (EN13501: Part 1)	B _{FL} – S ₁
Resistance to earth (EN1081)	< 1 MΩ

Note:- Samples cured for 28 days at 20 °C

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BASF Construction Chemicals 19 Broad Ground Road Lakeside, Redditch Great Britain B98 8YP	
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EN 13813:2002	
Synthetic resin screed material	
Reaction to fire:	B _{FL} – S ₁
Release of corrosive substances:	NPD
Water permeability:	NPD
Mechanical resistance:	NPD
Wear resistance:	AR0,5
Bond strength:	B>2,0
Impact resistance:	IR>4
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD
Electrical resistance:	ER ² <5x10 ⁴ - ER ³ <5x10 ⁴



We create chemistry

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Ucrete MF40AS-C - BASF plc, Construction Chemicals, Version 2

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, eg when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"BASF plc, Construction Chemicals" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.