Ucrete® HF60RT

6mm Heavy Duty Polyurethane Floor Finish

DESCRIPTION

Ucrete HF60RT is a 6mm flow applied floor topping based upon the unique Ucrete HD polyurethane resin system.
Ucrete HF60RT is designed for rapid installation, making it ideally suited for large fast track new build and refurbishment projects.

Ucrete HF60RT provides a lightly textured protective floor finish suitable for applications in wet and dry process environments. It is dense and impervious, providing the ideal floor finish for applications in the food and beverage, pharmaceutical and chemical industries and wherever a robust, long lived floor is required.

Ucrete Industrial Flooring has been widely used throughout industry for more than 40 years, many of the older floors are still in service. A detailed project reference list is available upon request.

PERFORMANCE DATA

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.

NON-TAINTING

Ucrete HF60RT is non-tainting from the end of mixing, as tested by the Campden Technology Ltd.

TEMPERATURE RESISTANCE

The **Ucrete HF60RT** resins do not start to soften until temperatures above 130°C are exceeded. **Ucrete HF60RT** floors are fully serviceable up to 80°C. Suitable for freezer temperatures down to -25°C.

TYPICAL PROPERTIES*

Density	1970kg/m³
Compressive strength (EN13892-2)	48-54MPa
Tensile strength (BS6319 Part 7)	6MPa
Flexural strength (EN13892-2)	14MPa
Compressive modulus (BS 6319:Part 6)	3000MPa
Adhesive strength to concrete (EN13892-8)	concrete failure
Coefficient of thermal expansion (ASTM C531:Part 4.05)	4.1×10^{-5} °C^{-1}
Fire Testing (EN13501: Part 1)	$B_{FL} - S_1$

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

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CHEMICAL RESISTANCE

Ucrete HF60RT offers exceptional resistance to a wide range of chemical aggressors. For example Ucrete is resistant to the following commonly encountered chemicals:

Acetic Acid, 50%: As spirit vinegar widely used in the food industry, indicative of resistance to vinegar, sauces, etc.

Concentrated Lactic Acid @ 60°C: Indicative of resistance to milk and dairy products.

Oleic Acid, 100% @ 60°C: Representative of the organic acids formed by oxidation of vegetable and animal fats widely encountered in the food industry.

Concentrated Citric Acid: As found in citrus fruits and representative of the wider range of fruit acids which can rapidly degrade other resin floors.

Methanol, 100%: Representative of alcohols and the wider range of solvents used in the pharmaceutical industry.

Ucrete HF60RT is also resistant to a wide range of mineral oils, salts and inorganic acids, extensive chemical resistance tables are available upon request.

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

IMPACT RESISTANCE

With high mechanical strengths and a low elastic modulus, **Ucrete HF60RT** 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.

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.

PERMEABILITY

Ucrete HF60RT exhibits zero absorption when tested to CP.BM2/67/2.

CLEANING AND HYGIENE

Ucrete flooring systems are accredited for use in facilities operating HACCP based food safety systems.

Regular cleaning and maintenance will enhance the life and appearance of any floor.

Ucrete HF60RT can be cleaned using industry standard cleaning chemicals and equipment. The use of a food industry standard scrubber drier machine is recommended.

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

SLIP RESISTANCE

The **Ucrete HF60RT** surface has a coefficient of friction as determined to EN13036 Part 4 with 4S rubber on the wet floor as follows:

Ucrete HF60RT 40 - 45

The **Ucrete HF60RT** surface profiles conform to DIN51130 as follows:

Ucrete HF60RT R10 flow application
R11 trowel application

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Ucrete HF60RT continues to maintain slip resistance even after years of hard and steel wheeled traffic.

Optimum slip resistance can only be maintained with regular cleaning.

COLOURS

Ucrete HF60RT is available in eight standard colours:

Red	Yellow	Green	Orange
Grey	Cream	Blue	Green/Brown

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 HF60RT from BASF plc, Construction Chemicals, of 19 Broad Ground Road, Redditch, Worcestershire, B98 8YP installed at 6mm with an R10/R11* surface finish
*(select as required)

A 6mm **Ucrete HF60RT** floor is fully resistant to high temperature spillage and discharge up to 80ºC and can be lightly steam cleaned. Suitable for freezer temperatures down to -25°C.

In extreme thermal shock environments, a well designed substrate of good quality concrete is essential.

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.

COVERAGE

6mm: 12-13kg/m²

Note: The above coverage rates do not include wastage.

CURING

Normally **Ucrete HF60RT** floors can be put into service within 24 hours even at 8ºC

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.

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.

* Properties listed are based on laboratory controlled tests.

Ucrete® HF60RT

CE

BASF Construction Chemicals
19 Broad Ground Road
Lakeside, Redditch
Great Britain B98 8YP

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01130071

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:	NPD

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