Ucrete RG

Heavy duty polyurethane render

DESCRIPTION
Ucrete RG is a unique HD Polyurethane thixotropic resin mortar with exceptional resistance to aggressive chemicals, heavy impact and temperatures up to 120°C.

Ucrete RG provides a robust render for vertical applications in wet and dry process environments. It is dense and impervious providing the ideal finish for applications in the food and beverage, pharmaceutical and chemical industries.

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

FIELD OF APPLICATION
Ucrete RG is used to protect vertical surfaces including:
- Plinths
- Drains
- Secondary containment bunds
- Tank bases
- Sumps
- Effluent storage pits
- Coving and skirting

FEATURES AND BENEFITS
- Expert installation by fully trained licensed applicators
- Suitable for application on to 7 day old concrete and 3 day old polymer screeds
- Achieves full cure in only 48 hours (subject to temperature)
- Hygienic and non-tainting
- Non-solvented
- Steam cleanable @ 9mm and above
- Rapid installation, up to 9mm in a single application

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 RG is non-solvented and non tainting from the end of mixing, as tested by the Campden Technology Ltd.

TEMPERATURE RESISTANCE
The Ucrete RG resins do not start to soften until temperatures above 130°C are exceeded. Specifications are available that are fully serviceable up to 130°C and resistant to occasional spillage up to 150°C.

Correctly installed, Ucrete RG can withstand regular and routine discharges of boiling water, hot oils and fats.

CHEMICAL RESISTANCE
Ucrete RG offers exceptional resistance to a wide range of chemical aggressors. For example it is resistant to the following commonly encountered chemicals:
- dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric
- dilute and concentrated alkalis, including sodium hydroxide to 50% concentration
- most dilute and concentrated organic acids
- fats, oils and sugars
- cleaning chemicals and sanitizing agents
- mineral oils, kerosene, gasoline and brake fluids
- most organic solvents

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

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

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IMPACT RESISTANCE
With high mechanical strengths and a low elastic modulus, Ucrete RG 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.

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 RG 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 of any finish, retain the appearance and reduce the tendency to retain dirt.

COLOURS
Ucrete RG 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 coving/lining/finish* shall be Ucrete RG from BASF plc, Construction Chemicals, of 19 Broad Ground Road, Redditch, Worcestershire, B98 8YP installed at 4/6/9*mm in accordance with the manufacturers' instructions.
*(select as required)

*A 4mm Ucrete RG lining is fully resistant to liquid spillage and discharge up to 70°C

*A 6mm Ucrete RG lining is fully resistant to liquid spillage and discharge up to 80°C and can be lightly steam cleaned.

*A 9mm Ucrete RG lining is fully resistant to high temperature spillage and discharge up to 120°C and is fully steam cleanable.

Where long term contact with chemicals will occur, when lining drains and sumps, for example, a minimum thickness of 6mm should be used

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 lining and sealed with a suitable sealant

COVERAGE
4mm: 8 - 9 kg/m^2
6mm: 12 - 13 kg/m^2
9mm: 18 - 20 kg/m^2

CURING
Normally Ucrete RG can be put into service within 24 hours even at 8ºC. Full chemical cure is achieved at 48 hours.

STORAGE
In covered warehouse conditions, above 5ºC and below 30ºC 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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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	2090 kg/m³
Compressive strength (EN13892-2)	47 - 52 MPa
Tensile strength (BS6319 Part 7)	7 MPa
Flexural strength (EN13892-2)	15 MPa
Abrasion resistance (EN5470-1) Taber H22 wheel, 1000 cycles	126 mg
Adhesive strength to concrete (EN13892-8)	concrete failure
Fire Testing (EN13501: Part 1)	$B_{FL} - S_1$

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

CE

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

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01130070

EN 1504-2: 2004

Synthetic resin coating system for chemical resistance

Reaction to fire:	$B_{FL} - S_1$
Abrasion resistance:	Pass
Resistance to severe chemical attack:	Class II Class I for amines
Adhesion strength:	B>2,0
Impact resistance:	Class I

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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.