

# Ucrete® RG

## Heavy Duty Polyurethane Render

### DESCRIPTION

**Ucrete RG** has a unique heavy duty Polyurethane resin technology 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 30 years; many of the older floors are still in service. A detailed project reference list is available upon request.

### RECOMMENDED FOR

**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

- Suitable for application onto 7 day old concrete and 3 day old polymer screeds
- Achieves full cure in only 48 hours (subject to temperature)
- Hygienic and non-tainting
- Solvent free
- Low maintenance – easy to clean
- Steam cleanable @ 9mm and above
- Rapid installation, up to 9 mm in a single application

### PERFORMANCE DATA

Samples cured for 28 days at 20°C

Density (BS 6319:Part 5)	2090 kg/m <sup>3</sup>
Compressive strength (BS 6319:Part 2)	52 MPa
Tensile strength (ISO R527)	7 MPa
Flexural strength (ISO 178)	15 MPa
Compressive modulus (BS 6319:Part 6)	3250 MPa
Adhesive strength to concrete (BS6319:Part 4)	Concrete failure
Fire Testing: EN13501: Part 1	B – S1
Surface spread of flame (BS 476:Part 7)	Class 2

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

#### Temperature Resistance

The **UCRETE RG** resins do not start to soften until temperatures above 130°C are exceeded. Specifications

are available that are serviceable up to 120°C and are fully steam cleanable.

#### Non Tainting

**UCRETE RG** is solvent free and non tainting as tested by the Campden & Chorleywood Food Research Association

#### 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.

#### 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.

#### Permeability

**UCRETE RG** exhibits zero absorption when tested to CP.BM2/67/2.

#### 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.

#### 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.'

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### PROPERTIES

UCRETE RG is available in eight colours:

**Red, Yellow, Green, Orange, Grey, Green/Brown, Cream and Light Grey.**

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.

### CONSUMPTION

#### Coverage

4 mm: 8 - 9 kg/m<sup>2</sup>

6 mm: 12 - 13 kg/m<sup>2</sup>

9 mm: 18 - 20 kg/m<sup>2</sup>

### PACKAGING

Ucrete part 1	0.71 kg
Ucrete part 2	1.09 kg
Ucrete part 3	9.53 kg
Ucrete pigment	0.50 kg

### CURING

Normally UCRETE RG can be put into service within 24 hours even at 8°C. Full chemical cure is achieved at 48hours.

### CLEANING

#### Cleaning

Regular cleaning and maintenance will enhance the life of any finish, retain the appearance and reduce the tendency to retain dirt.

### 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. Parts 1 and 2 must be protected from frost.

### PRECAUTIONS

**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.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** from our office or our website.

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