

# Ucrete® RG

## Heavy Duty Polyurethane Hybrid 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 through-out industry for more than 40 years, many of the older floors are still in service. A detailed project reference list is available upon request.

### RECOMMENDED USES

**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

- **Fast application** - Suitable for application onto 7 day old concrete and 3 day old polymer screeds
- **Rapid installation** - Up to 9 mm in a single application
- **Fast cure** - Achieves full cure in only 48 hours (subject to temperature)
- **Non Tainting** - Is solvent free and non-tainting as tested by the Campden & Chorleywood Food Research Association
- **Temperature Resistant** - Steam cleanable (9mm or greater)

### ACCREDITATIONS

- 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.
- All Ucrete grades give very low emissions and conform to all the emissions requirements for indoor flooring systems in Europe including AgBB in Germany, rated A+ for VOC emissions from Afsset in France and M1 in Finland.

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

### PERFORMANCE DATA

Density (kg/m <sup>3</sup> ) (BS 6319:Part 5)	2090
Compressive strength (MPa) (BS 6319:Part 2)	47-52
Tensile Strength (MPa) (ISO R527)	7
Flexural strength (MPa) (ISO 178)	15
Compressive modulus (BS 6319:Part 6)	3250 MPa
Adhesive strength to concrete (BS6319:Part 4)	Concrete Failure
Fire Testing (EN13501: Part 1 )	BFL – S1
Surface spread of flame (BS 476:Part 7)	Class 2
Water Adsorption (CP.BM 2/67/2)	0 MI
<i>Samples cured for 28 days at 20°C. 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.</i>	

### 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 discoloration may occur with some chemicals depending upon the nature of the spillage and the standards of housekeeping employed.

# Ucrete<sup>®</sup> RG

## Substrate Moisture Tolerance

**Ucrete** Industrial Flooring is extremely tolerant to residual substrate moisture and can be installed directly onto 5 day old concrete, or onto sound existing concrete with high moisture contents without the use of special primers provided there is a functioning Damp Proof Membrane below the slab. This enables rapid refurbishment work in wet process areas. Epoxy surface DPMs offer no benefit and should not be used with **Ucrete** floors.

## UV Resistance

The Ucrete resin systems have been formulated to provide the very highest chemical and heat resistance. UV exposure though not affecting the performance of the Ucrete will result in yellowing of the floor which is most apparent in light colours.

## APPLICATION

### 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

For information about application, please obtain a copy of the Master Builders Solutions "Application Guide for Ucrete<sup>®</sup>" from your local representative.

## COLORS

**Ucrete RG** is available in Grey, Green, Cream, Yellow, Orange, Red, Blue, Light grey & Light green colors.

## ESTIMATING DATA

**Ucrete RG** should be installed as per the consumption rates given below:

Thickness	Consumption
4mm	8 - 9 Kgs/m <sup>2</sup>
6mm	12 - 13 Kgs/m <sup>2</sup>
9mm	18 - 20 Kgs/m <sup>2</sup>

## PACKAGING

<b>Ucrete RG</b> part 1	0.71 kg
<b>Ucrete RG</b> part 2	1.09 kg
<b>Ucrete RG</b> part 3	9.53 kg
<b>Ucrete</b> pigment	0.50 kg

## PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability, or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified, or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

### MB Solutions Singapore Pte Ltd

1 Harbourfront Avenue #07-07/08  
 Keppel Bay Tower, Singapore 098632  
 Tel : +65 6232 4888