



The Chemical Company

# UCRETE® WR

Polyurethane concrete system for vertical surfaces

## DESCRIPTION

**Ucrete WR** is a single layer, seamless, solvent-free, polyurethane system for vertical surfaces with a textured matt finish. It withstands abrasive wear and a wide spectrum of chemicals. It is fully complementary to all Ucrete Flooring Systems.

## RECOMMENDED FOR

Conditions requiring maximum chemical resistance, health and safety, and protection of surfaces subject to impact and hot /cold liquid drainage.

Specific applications include:

- coving
- plinths and machine/plant bases
- sump and drain linings
- bunds and bund linings

All applications where **Ucrete** Flooring Systems are used.

## FEATURES AND BENEFITS

- **Expert application**  
*Installed only by trained and approved specialist contractors*
- **Fast application/rapid access**  
*Can be applied to 6 day-old-concrete/2 day-old-polymer screed*  
*Short curing time and 8 hour access to foot traffic; 24 hours for vehicles*
- **Hygienic/safe**  
*Slip resistant; non-tainting, non-dusting, monolithic (minimum joints), easy to maintain, microbiologically inert.*
- **Durable/long life**  
*Wide chemical resistance, wear and impact resistant, resists temperatures up to 120°C; more than 25 years of international use.*
- **Prepacked**  
*Preweighed / prepacked for immediate use; batch-to-batch colour matched for consistency.*

## TYPICAL PERFORMANCE DATA

(Test data - 28 days @ 20°C)

Compressive Strength (BS6319:Part 2)	: 45 MPa
Flexural Strength (ISO178)	: 10 MPa
Dynamic E-Modulus (ASTM C597-83)	: 18 Gpa
Tensile Strength (ISO R527)	: 7 MPa
Concrete Adhesion (BS6319:Part 4)	: concrete fails
Coeff. Thermal Expansion (ASTM C531)	: $2.4 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$
Thermal Conductivity (BS874)	: 1.1W/m°C
Surface Resistivity (BS2050)	: $3 \times 10^4 \text{ ohms}$
Surface Spread of Flame (BS476:Part 7)	: Class 2
Density	: 2100 kg/m <sup>3</sup>

## PROPERTIES

Colours (via colour pack)	: Yellow ~ Cream~ Orange~ Red ~ Green ~ Grey ~
Thickness	: 4 mm (minimum) to 9 mm
Service temperatures	: at 9 mm : 120°C max. & - 20°C at 4 mm : 60°C max. & - 15°C

## APPLICATION

### Surface Preparation

Concrete shall be clean, structurally sound and free from foreign materials, contaminants, oily products and other debris. Concrete surfaces shall be 'visibly dry' with no standing water. The minimum tensile (pull-off) strength shall be 1.5N/mm<sup>2</sup> and concrete shall have cured for at least 5 days. Concrete substrates shall incorporate a continuous waterproofing membrane.

Concrete design shall allow provisions for movement joints, as required. In addition, provision shall be made for induced joints to allow any shrinkage of the concrete to occur along defined planes.

All laitance shall be removed. All imperfections such as holes and cracks shall be repaired and leveled with the mean level of the surface. For repairing surface unevenness, **EMACO**® Concrete Repair Systems shall be used.

The whole surface shall be enclosed or impact shot blasted, surface planed, ground or high-pressure water jetted. All high spots shall be removed.

Surfaces shall be rendered 'visibly dry' by heat or mechanical means. Remove all loose material and dust by vacuum or mechanical means.

### Priming

The initial layer of **Ucrete WR** shall be applied to a cured coat of **Ucrete GC Primer** of 50 microns nominal thickness. Subsequent layers are applied direct to cured primer layer.

### Placing

**Ucrete WR** shall be mixed and applied only by specialist flooring contractors who have been trained in the correct application procedures

### Sealing

Appearance is enhanced by brushing the uncured surfaces with a solvent-dampened brush or coating with a clear or pigmented polyurethane sealer.



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## CURING

At 30°C, foot traffic access in 8 hours; vehicular traffic in 16 hours. At 20°C, foot traffic access in 12 hours; vehicular traffic in 24 hours.

## CLEANING

Regular cleaning, dry or wet mechanical scrubbing, or hot flushing with detergents or detergent/sterilant products will enhance the floor's appearance and reduce soiling tendencies. Direct steam cleaning is suitable for surfaces applied at more than 8-mm thickness.

## ESTIMATING DATA

**Ucrete WR** – 2.8 to 3.0 kg/m<sup>2</sup>/mm thickness

**Ucrete GC** – 0.24 kg/m<sup>2</sup>

## PACKAGING

**Ucrete WR & Ucrete GC** are supplied in units for immediate use, consisting of:

<b>Ucrete WR</b> Part 1	:	1.065 kg
<b>Ucrete WR</b> Part 2	:	1.09 kg
<b>Ucrete WR</b> Part 3	:	11.75 kg
<b>Ucrete GC</b> Part 1	:	1.72 kg
<b>Ucrete GC</b> Part 2	:	0.88 kg

## SHELF LIFE

**Ucrete WR** can be kept for 12 months from date of manufacture, in original unopened packaging, if stored under cover and above ground level at 30°C or less, avoiding exposure to direct sunlight.

## PRECAUTIONS

Material Safety Data Sheets (MSDS) for each component of **Ucrete WR** are available. Gloves and eye protection shall be worn during mixing and application.

For detailed Health, Safety and Environmental recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

All BASF Construction Chemicals Australia & New Zealand data sheets are updated on a regular basis, it is the user's responsibility to obtain the most recent issue AUcWR7/0107

## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** 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

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<b>BASF Construction Chemicals Australia Pty Ltd</b> Incorporated in NSW A.B.N. 46 000 450 288 Head Office: 11 Stanton Road Seven Hills, NSW 2147 Ph. (02) 8811 4200	Newcastle (02) 4961 3819 Canberra (02) 6280 6010 Brisbane (07) 3633 9900 Townsville (07) 4774 7344 Melbourne (03) 9549 0300	Adelaide (08) 8139 7500 Perth (08) 9366 2600 Darwin (08) 8984 3269 Kalgoorlie 0417 772 355
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**BASF Construction Chemicals New Zealand Ltd** Head Office: 45 William Pickering Drive, Albany, Auckland Ph: (09) 414 7233  
BASF WEB SITES [www.basf-cc.com.au](http://www.basf-cc.com.au) [www.basf-cc.co.nz](http://www.basf-cc.co.nz) [www.basf-ugc.com](http://www.basf-ugc.com)