

# UCRETE<sup>®</sup> WR

## Heavy Duty Polyurethane Concrete Mortar for Coving and Vertical Surfaces

### Description of Product

UCRETE<sup>®</sup> WR is a three component trowel applied coving mortar applied in layers of 3 to 6mm. UCRETE<sup>®</sup> WR should always be applied onto PRIMER TC a solvent free, two component tack primer.

### Fields of Application

UCRETE<sup>®</sup> WR is used to form coves and skirtings and protect vertical surfaces including:

- Plinths
- Drains
- Tank bases
- Sumps
- Effluent storage pits

### Features and Benefits

- Expert installation by fully trained licensed applicators
- 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

UCRETE<sup>®</sup> WR is available in six standard colours:

Cream  
Green  
Grey  
Orange  
Red  
Yellow

Other colours may be available to meet special requirements but will be subject to minimum order quantities and may require extended lead times.

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 may well occur in areas of direct UV exposure. This is most apparent in lighter colours .

### Technical Data/Typical Properties<sup>(a)</sup>

Density (BS 6319:Part 5), Kg/m <sup>3</sup>	1810
Compressive strength (BS 6319:Part 2), N/mm <sup>2</sup>	36
Tensile strength (BS6319 :Part 7), N/mm <sup>2</sup>	4.3
Flexural strength (ISO 178), N/mm <sup>2</sup>	9.2
Modulus in Compression (BS6319:Part6)	2750
Adhesive strength to concrete (BS6319:Part 4), N/mm <sup>2</sup>	concrete failure
Coefficient of thermal expansion (ASTM C531:Part 4.05), °C <sup>-1</sup>	2.4 x 10 <sup>-5</sup>
Water absorption (CP.BM 2/67/2) ml	0
Sensory evaluation (C&CFRA method TES-S-002)	No taint

<sup>(a)</sup> samples cured for 28 days at 20°C

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#### Chemical Resistance

UCRETE® WR will resist spillages of:

- 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
- mineral oils, kerosene, gasoline and brake fluids
- most organic solvents

At 3mm a maximum service temperature of 60°C should be observed. This rises to 120°C at a thickness of 9mm.

Whilst UCRETE® industrial flooring systems provide excellent chemical resistance, as in all corrosive situations a full analysis of operating and exposure conditions is required, followed by reference to chemical resistance data to ensure product suitability.

In certain aggressive continuous immersion situations such as drains and sumps Ucrete UD200 may be required to provide optimum chemical resistance.

Detailed information on chemical resistance is available from the Industrial Flooring Sales Office on **+44 (0) 1527 505100**.

#### Application Procedure

##### Substrate quality

Substrates will normally be concrete or polymer modified screeds. Other substrates may be suitable; consult your specialist applicator or the Industrial Flooring Sales Office for advice on **+44 (0) 1527 505100**.

All substrates must be clean and free from dust and loose particles. Concrete and other cementitious substrates must be visibly dry and have a minimum tensile (pull-off) strength of 1.5 N/mm<sup>2</sup>. UCRETE® WR may be applied to substrates of lower strength but the long-term performance of the floor may be affected. All traces of contaminants, such as oils, fats, greases, paint residues, chemicals, algae and laitance, should be removed.

#### Preparation of Substrate

As with all surface coatings, proper surface preparation is vital to ensure the successful application and performance of UCRETE® WR.

For practical reasons, coves are generally prepared by grinding or surface planing, whilst vertical surfaces may require abrasive blasting followed by vacuum cleaning to remove loose particles. High impact preparation methods such as air impact hammer (scabblers) may cause internal fracture of the concrete matrix and subsequent reduction in strength. Great care should be taken with these preparation methods. Chemical methods, such as acid etching, are not reliable and *not recommended*.

#### Mixing and application

Full details of correct mixing and application procedures for both PRIMER TC and UCRETE® WR are given in the UCRETE® Application Manual which is available to licensed and specialist applicators only.

#### Coverage

Coverage is influenced by substrate roughness, porosity and temperature, but allowing for normal wastage factors will be approximately:

1.8kg/mm/m<sup>2</sup>

#### Curing

The following table should be used as a guide at 15 to 25°C.

Operational, hours	8
Full traffic and chemical resistance, hours	48

#### Cleaning

Cleaning of plant and equipment should be undertaken well away from the application area. Xylene may be used to clean equipment, tools and spillages. In the case of spillages, excess material must first be absorbed onto sawdust or other disposable absorbent medium. Use correct handling procedures with solvents and take care to avoid any accidental spillage or splashes onto coated surfaces.

Part 2 containers may contain small amounts of unreacted diisocyanates (MDI). Therefore they must be decontaminated with a 5% solution of soda ash (sodium carbonate or washing soda) prior to disposal as building waste.

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#### Maintenance

Regular cleaning and maintenance will prolong the life of all resin floors, enhance the appearance and reduce the tendency to retain dirt.

Specialised floor cleaning equipment and chemicals are available and the suppliers are able to offer advice on appropriate cleaning regimes. Consult them or the Industrial Flooring Sales Office on **+44 (0) 1527 505100**.

#### Packaging

PRIMER TC is supplied as two factory-batched components.

UCRETE® WR is supplied as three factory-batched components.

#### Storage

All parts of UCRETE® PRIMER TC and UCRETE® WR should be stored under cover and free of the ground. Storage conditions should be dry, above 5°C and below 30°C. Part 1 of UCRETE® WR must not be allowed to freeze.

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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.

#### Powder Products

Should be handled to minimise dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes which should be protected during 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" (the Company) endeavour 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.

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