



# Ucrete MT

## 4 - 6 mm Heavy Duty Polyurethane Floor Finish

### MATERIAL DESCRIPTION

**Ucrete MT** provides a lightly textured protective floor finish suitable for applications in wet and dry process environments. It is dense and impervious, providing the ideal floor finish for applications in the food and beverage, pharmaceutical and chemical industries and wherever a robust, long lived floor is required. 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.

### COLOURS

**Ucrete MT** is available in eight standard colours:

Red	Grey	Yellow
Blue	Green/Brown	Cream
Orange	Green	

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.

### RAPID INSTALLATION

Specifications are available that enable **Ucrete MT** and primer to be installed and cured within a 12 hour application window. Being non tainting also, this makes it ideally suited for rapid refurbishment in the food industry. Refer to method statement for application details.

### TEMPERATURE RESISTANCE

4mm **Ucrete MT** floors are fully serviceable from -15°C to 70°C.

6mm **Ucrete MT** floors are fully serviceable from -25°C to 80°C.

### 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 Master Builders Solutions representative.

### NON-TAINING

**Ucrete MT** is solvent free and non-tainting from the end of mixing, as tested by the Campden Technology Ltd.

### CHEMICAL RESISTANCE

**Ucrete MT** offers exceptional resistance to a wide range of chemical aggressors. For example, Ucrete is resistant to the following commonly encountered chemicals:

Acetic Acid, 50%: As spirit vinegar widely used in the food industry, indicative of resistance to vinegar, sauces, etc.

Concentrated Lactic Acid @ 60°C: Indicative of resistance to milk and dairy products.

Oleic Acid, 100% @ 60°C: Representative of the organic acids formed by oxidation of vegetable and animal fats widely encountered in the food industry.

Concentrated Citric Acid: As found in citrus fruits and representative of the wider range of fruit acids which can rapidly degrade other resin floors.

Methanol, 100%: Representative of alcohols and the wider range of solvents used in the pharmaceutical industry.

Ucrete MT is also resistant to a wide range of mineral oils, salts and inorganic acids, extensive chemical resistance tables are available upon request.

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

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### TYPICAL PROPERTIES\*

Density	2200 kg/m <sup>3</sup>
Compressive strength (EN13892-2)	48 - 53 MPa
Tensile strength (BS6319 Part 7)	6 MPa
Flexural strength (EN13892-2)	14 MPa
Adhesive strength to concrete (EN13892-8)	concrete failure
Fire Testing (EN13501: Part 1)	BFL – S1

Note: Samples cured for 28 days at 20°C

### PACKAGING

**Ucrete MT:** 25.73 kg kit.

Part 1 = 2.37 kg

Part 2 = 2.86 kg

Part 3 = 20 kg

Part 4 = 0.5 kg

### IMPACT RESISTANCE

With high mechanical strengths and a low elastic modulus, **Ucrete MT** 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 floors.

### 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 MT** exhibits zero absorption when tested to CP.BM2/67/2.

### SLIP RESISTANCE

The **Ucrete MT** surface profile has a coefficient of friction as determined to EN 13036 Part 4 with 4S rubber on the wet floor as follows:

#### **Ucrete MT 40 - 45**

Optimum slip resistance can only be maintained with regular cleaning.

### SPECIFICATION

The floor finish shall be **Ucrete MT** from Master Builders Solutions installed at 4/6\* mm in accordance with the manufacturers' instructions \*(select as required)

\*A 4mm **Ucrete MT** floor is fully resistant to high temperature spillage and discharge up to 70°C and can be lightly steam cleaned. Suitable for freezer temperatures down to -15°C.

\*A 6mm **Ucrete MT** floor is fully resistant to liquid spillage and discharge up to 80°C and can be lightly steam cleaned. Suitable for freezer temperatures down to -25°C.

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 floor and sealed with a suitable sealant.

### COVERAGE

4mm: 10.0 kg/m<sup>2</sup>

6mm: 12.0 kg/m<sup>2</sup>

Note: Above coverage rates do not include wastage.

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### CURING

Normally **Ucrete MT** floors can be put into service within 24 hours even at 8°C. Specifications are available that can be put back into service after 5 hours at 10°C.

### 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 and appearance of any floor. **Ucrete MT** is readily cleaned with industry standard cleaning chemicals and equipment.

### 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. Liquid components must be protected from frost.

Shelf life is 12 months from date of manufacture when stored in undamaged, unopened packaging. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Master Builders Solutions' Technical Services Department.

### 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.

### WARNING 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.

### NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

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\* Properties listed are based on laboratory controlled tests.

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