

## Ucrete® MF 40 AS

#### **Antistatic Heavy Duty Flow Applied Resin Floor Finish**

#### **DESCRIPTION OF PRODUCT**

**Ucrete® MF 40 AS** is a unique heavy duty resin floor which provides a smooth protective antistatic floor finish suitable for applications in predominantly dry environments.

**Ucrete® MF 40 AS** is used in the electronics industry to protect sensitive electronic devices and in explosion hazarded ar-eas.

It is dense and impervious, providing the ideal floor finish for applications in the electronics, food, pharmaceutical and manufacturing industries including clean room, laboratory, packing hall and warehouse applications and wherever a robust, long lived antistatic 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

#### **FEATURES AND BENEFITS**

- Expert installation by fully trained licensed applicators
- Non-tainting from the end of mixing, as tested by the Campden Technology Ltd.
- Can be applied to early age concrete
- Does not support bacterial or mould growth
- Very low body voltage generation

#### PERFORMANCE DATA 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.

#### **ANTISTATIC PROPERTIES**

**Ucrete® MF 40 AS** meets the the requirements for floors of BS5958 and the European guidelines for Protection of workers potentially at risk from explosive atmospheres and EN61340 for use in the electronics industry.

For detailed information on earthing anti-static floors refer to the separate datasheet 'Guidelines to Earthing of Ucrete®

#### **TEMPERATURE RESISTANCE**

A **Ucrete® MF 40 AS** floor is fully resistant to liquid spillage and discharge up to 70°C. Suitable for freezer temperatures down to -15°C.

#### **CHEMICAL RESISTANCE**

**Ucrete® MF 40 AS** offers exceptional resistance to a wide range of chemical aggressors. For example **Ucrete®** is resistant to spillages of the following commonly encountered classes of chemicals:

Most dilute and concentrated organic acids such as, Acetic Acid, Lactic Acid, Oleic Acid and Citric Acid as commonly found in the food industry,

Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric.

Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration

Animal fats and vegetable oils, sugars flavourings and essences.

Mineral oils, kerosene, gasoline and brake fluids

A wide range of organic solvents including Methanol, Xylene Ethers and Chlorinated solvents

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

Extensive chemical resistance tables are available in the separate data sheet 'A guide to the chemical resistance of Ucrete Flooring'.

For detailed information, please contact your local **Master Builders Solutions** Construction Chemicals office for guidance.

#### **NON TAINTING**

**Ucrete® MF 40 AS** is non tainting from the end of mixing, as tested by the Campden Technology Ltd.

#### **IMPACT RESISTANCE**

With high mechanical strengths and a low elastic modulus, Ucrete® MF 40 AS is very resilient and able to withstand se-vere 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, pro-vided there is a functioning DPM within the structure.

This enables rapid construction programmes to be maintained and facilitates refurbishment work in wet process ar-eas

Epoxy surface DPMs should not be used as they soften under high temperature conditions and will lead to floor failure.



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#### **PERMEABILITY**

**Ucrete® MF 40 AS** exhibits zero absorption when tested to CP.BM2/67/2.

#### **CLEANING & HYGIENE**

Regular cleaning and maintenance will enhance the life and appearance of any floor. **Ucrete® MF 40 AS** is readily cleaned with industry standard cleaning chemicals and equipment. Please consult your local cleaning chemical or equipment supplier.

Detailed cleaning guidelines are available from your local **Master Builders Solutions** Construction Chemicals office.

#### SLIP RESISTANCE

The **Ucrete® MF 40 AS** floors have coefficient of friction as determined to EN13036 Part 4 with 4S rubber on the wet floor as follows:

Ucrete® MF 40 AS 30 - 35

The **Ucrete® MF 40 AS** surface profiles conform to DIN51130 as follows:

Ucrete® MF 40 AS R10 V -

Optimum slip resistance can only be maintained with regular cleaning.

#### **COLORS**

Ucrete® MF 40 AS is available in nine standard colours:

Red Yellow Green Orange Grey Cream Blue Green/Brown

**Ucrete**® floor systems have been formulated to provide the very highest chemical and heat resistance. As a direct re-sult, some yellowing of the installed floor will occur in areas of direct UV exposure. This is most apparent in lighter col-ours.

#### **SPECIFICATION**

The floor finish shall be **Ucrete® MF 40 AS** from **Master Builders Solutions** plc, Construction Chemicals of 19 Broad Ground Road, Red-ditch, Worcestershire, B98 8YP, installed at 4/6\*mm in ac-cordance with the manufacturer's instructions.

\*(select as required)

#### 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.

#### APPLICATION CONDITIONS

For best results materials, substrate and air temperature should be in the range 18 - 22°C. Whilst **Ucrete® MF 40 AS** will cure out effectively over a wide range of temperatures the optimum appearance is most readily achieved under good site conditions

Low temperatures will retard the setting and can impair the visual appearance of the floor.

High temperatures will shorten the open time and can impair the appearance of the floor.

#### **COVERAGE**

4mm: 8 - 10kg/m<sup>2</sup> 6mm: 12 - 14kg/m<sup>2</sup>

#### **CURING**

Normally **Ucrete® MF 40 AS** can be put into service within 24 hours.

#### **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.

#### **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

#### **WARNINGS AND PRECAUTIONS**

In its cured state **Ucrete®** is physiologically nonhazardous. 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.

#### **CONTACT INFORMATION**

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### **Antistatic Heavy Duty Flow Applied Resin Floor Finish**

| Typical Properties  |                                       |
|---|---------------------------------------|
| Density   | 1970 kg/m³                            |
| Compressive strength (EN13892-2)  | 48-53 MPa                             |
| Tensile strength (BS6319 Part 7)  | 9 MPa                                 |
| Flexural strength (EN13892-2)   | 18-21 MPa                             |
| Compressive modulus (BS 6319:Part 6)  | 3250-4000 MPa                         |
| Adhesive strength to concrete (EN13892-8)   | concrete failure                      |
| Coefficient of thermal expansion (ASTM C531:Part 4.05)  | 3.6 x 10-5 °C-1                       |
| Fire Testing (EN13501: Part 1)  | BFL – S1                              |
| Resistance to earth (EN1081) Resistance to earth (EN61340-4-1) Resistance of man to earth (EN61340-4-5) Body voltage generation (EN61340-4-5) | < 1 MΩ<br>< 1 GΩ<br>< 35 MΩ<br><100 V |





