

# Ucrete® TZ

## Heavy Duty Polyurethane Terrazzo Floor Finish

### DESCRIPTION

**Ucrete TZ** is a unique HD Polyurethane resin floor with exceptional resistance to aggressive chemicals, heavy abrasion and thermal shock.

**Ucrete TZ** provides a smooth protective floor finish suitable for applications in predominantly dry environments.

It is dense and impervious providing the ideal floor finish for applications in pharmaceutical production facilities including process areas, clean room, laboratory, packing hall and warehouse applications and wherever a highly attractive, 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

### RECOMMENDED USES

**Ucrete TZ** is recommended for conditions requiring the maximum chemical resistance and where a smooth, even and easy to clean surface with attractive terrazzo finish is required.

Specific applications include:

- Textile and film plants
- Food and beverage production
- Warehousing and storage
- Confectionery production
- Pharmaceutical production
- Chemical plants
- Hotel Kitchens

### FEATURES AND BENEFITS

- **Expert application** - Installed only by trained and approved specialist contractors.
- **Fast application /rapid access** - Can be applied to 4-day-old concrete/2-day-old polymer screeds.
- **Short curing time** - 8 hours access to foot traffic; 24 hours for vehicles.
- **Hygienic/Safe** - Non-tainting, non-dusting, monolithic (minimum joints); easy to maintain; microbiologically inert.
- **Pre-packed** - Pre-weighed/pre-packed for immediate use; batch-to-batch colour matched for consistency.
- **Terrazzo Finish** – Attractive and Aesthetic appearance

### ACCREDITATION

- Ucrete flooring systems are accredited for use in facilities operating HACCP based food safety systems.

- 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**.

### PERFORMANCE DATA

|   |                                  |
|---|----------------------------------|
| Compressive Strength (MPa) (BS6319:Part 2)  | 52-57                            |
| Flexural Strength (MPa) (ISO178)  | 14                               |
| Compressive Modulus (MPa) (BS 6319: Part 6)   | 3250                             |
| Tensile Strength (MPa) (BS 6319: Part 7)  | 6                                |
| Concrete Adhesion (BS6319:Part2)  | Concrete Failure                 |
| Coeff. Thermal Expansion (ASTM C531)  | 2.4x10-5 °C <sup>-1</sup>        |
| Slip Resistance   |                                  |
| EN 13036 (4S Rubber)  | 35 - 40                          |
| Density   | 2090 kg/m <sup>3</sup>           |
| Water Adsorption (CP.BM 2/67/2)   | 0 mL                             |
| Fire Testing (EN 13501: Part 1)   | B <sub>FL</sub> – S <sub>1</sub> |
| Service temperatures  |                                  |
| 9 mm  | - 40°C to 120°C                  |
| 12 mm   | - 40°C to 130°C*                 |
|   | 150°C (Occasional Spillage)      |
| <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 TZ** 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.

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

Animal fats and vegetable oils, sugars flavorings 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 discoloration 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 office for guidance.

## Substrate Moisture Tolerance

Ucrete Industrial Flooring is extremely tolerant to residual substrate moisture and can be installed directly onto 7 days 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 programs 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.

## Impact Resistance

With high mechanical strengths and a low elastic modulus, **Ucrete TZ** 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 debonding are unknown 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 colors.

## COLORS

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

## 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 floor and sealed with a suitable sealant

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

## ESTIMATING DATA

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

| Thickness | Consumption                |
|-----------|----------------------------|
| 9mm       | 20 - 22 Kgs/m <sup>2</sup> |
| 12mm      | 26 - 27 Kgs/m <sup>2</sup> |

## PACKAGING

**Ucrete TZ** is supplied in multi-component polykit as given below:

|                              |          |
|------------------------------|----------|
| <b>Ucrete TZ Part 1</b>      | 2.37 kg  |
| <b>Ucrete TZ Part 2</b>      | 2.86 kg  |
| <b>Ucrete TZ Part 3</b>      | 24.80 kg |
| <b>Ucrete Part 4 pigment</b> | 0.5 kg   |

## PRECAUTIONS

For detailed Environmental, Health and Safety information, please consult and follow all instructions on the product Material Safety Data Sheet. Contact your local Master Builders Solutions office for the latest version.

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### 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

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### MB Solutions Singapore Pte Ltd

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

[www.master-builders-solutions.com/en-asiapacific](http://www.master-builders-solutions.com/en-asiapacific)