

# UCRETE<sup>®</sup> MF

Medium duty polyurethane concrete flooring system

## DESCRIPTION

**UCRETE MF** is a single layer, seamless, solvent-free, polyurethane flooring system with a smooth matt surface finish. It has high impact resistance and withstands abrasive wear and a wide spectrum of chemicals.

## RECOMMENDED FOR

**UCRETE MF** is recommended for conditions requiring the maximum chemical resistance and where a smooth, even and easy to clean surface is required.

Specific applications include:

- textile and film plants
- food and beverage production
- warehousing and storage
- confectionery production
- electronic component manufacture & assembly
- pharmaceutical production
- chemical plants

## FEATURES AND BENEFITS

**"HACCP Accredited** UCRETE products have been accredited for use in facilities covered by HACCP accreditation."

*UCRETE MF has approval for use as flooring for HACCP accredited facilities.*



- **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 screeds. Short curing time with 8 hour access to foot traffic; 24 hours for vehicles.
- **Hygienic/Safe**-Non-tainting, non-dusting, monolithic (minimum joints); easy to maintain; microbiologically inert.
- **Durable/long life**-Wide chemical resistance; wear and impact resistant; resists cleaning temperature up to 80°C at 6 mm thickness and at 3mm to 60 °C; 25 years of international use.
- **Pre-packed**-Pre-weighed/pre-packed for immediate use; batch-to-batch colour matched for consistency.

## PERFORMANCE DATA

(Test data 28 days @ 20°C)

Compressive Strength (BS6319:Part 2)	: 55N/mm <sup>2</sup>
Flexural Strength (ISO178)	: 21N/mm <sup>2</sup>
Dynamic E-Modulus (ASTM C597-83)	: 14000N/mm <sup>2</sup>
Tensile Strength (ISO R527)	: 9N/mm <sup>2</sup>
Concrete Adhesion (BS6319:Part2)	: concrete fails
Abrasion Resistance BS 8204-2	: Class AR0.5

(Taber CS17)	: 120mg
Coeff. Thermal Expansion (ASTM C531)	: 3.6x10 <sup>-5</sup> °C <sup>-1</sup>
Thermal Conductivity (BS874)	: 0.9W/m°C
Surface Resistivity (BS2050)	: 2x10 <sup>11</sup> ohms
Density (BS6319:Part)	: 1970 kg/m <sup>3</sup>
Water Adsorption (CP.BM 2/67/2)	: 0 mL
Surface Spread of Flame (BS476:Part 7)	: Class 2

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.

## PROPERTIES

Colours: Yellow, Cream, Orange, Red, Green and Grey.

Thickness	: 3 to 6 mm.
Service temperatures: at 6 mm	: 80°C* maximum & - 15°C
at 3 mm	: 60°C maximum & - 15°C

\*Excursions to 80°C during cleaning allowable

## ESTIMATING DATA

2.25 to 2.50 kg/m<sup>2</sup>/mm thickness

## 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 levelled with the mean level of the surface. For repairing surface unevenness, **EMACO<sup>®</sup>** concrete repair systems shall be used.

The whole surface shall be enclosed and 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 other mechanical means.

For information about application, please obtain a copy of the BASF "Application Guide for UCRETE" from your local representative.

### Priming

**UCRETE MF** shall be applied to a cured scratch coat of **UCRETE MF** of 1 mm nominal thickness.



The Chemical Company

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## Placing

UCRETE MF shall be mixed and applied only by specialist flooring contractors who have been trained in the correct application procedures.

## 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. Full cure at 28days.

## 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.

## COLOUR

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.

## PACKAGING

UCRETE MF is supplied in units for immediate use, consisting of:

- UCRETE MF Part 1 : 2.52 kg
- UCRETE MF Part 2 : 2.86 kg
- UCRETE MF Part 3 : 14.4 kg
- UCRETE Liquid Polykit Pigment : 0.5 kg

## SHELF LIFE

UCRETE MF can be kept for 12 months from date of manufacture when stored at 30°C or less above ground level and under cover in original unopened packaging, away from exposure to direct sunlight.

## PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheets (MSDS)** from our office or our website.

MSDS for each component of **UCRETE MF** are available. Gloves and eye protection shall be worn during mixing and application.

## OTHER INFORMATION

'Design and Preparation of substrates for UCRETE Flooring'

'BS8204:Part1:1987 – Insitu Flooring – code of practice for concrete bases and screed to receive insitu flooring'

'ICRI-Selection of surface preparation methods for concrete substrates receiving resin flooring'.

BASF Construction Chemicals Product Data Sheets for: **EMACO<sup>®</sup>** concrete repair products.

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## STATEMENT OF RESPONSIBILITY

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

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **BASF**, are responsible for carrying out procedures appropriate to a specific application.

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