

# Ucrete DP

Heavy duty non-slip polyurethane hybrid flooring system

## Material Description

**Ucrete DP** has a unique heavy-duty Polyurethane hybrid technology with exceptional resistance to aggressive chemicals, heavy impact and temperatures from -25°C up to 130°C.

**Ucrete DP** is a family of products with defined surface profiles suitable for applications in wet and dry process environments. The system offers a uniformity of surface texture with a gloss or matt finish, so providing a safe and attractive working environment.

**Ucrete DP** is broadcast with Master Builders Solutions Fillers to increase surface texture and slip resistance. It is typically installed at 4, 6 & 9 mm thick.

It is dense and impervious, providing an ideal floor finish for applications in the food and beverage, pharmaceutical and chemical industries and wherever a robust long-lived floor is required.

## Areas of Application

**Ucrete DP** is recommended for conditions requiring maximum chemical resistance and a slip-resistant surface.

- Specific applications include:
- Textile and film plants
- Food and beverage production
- Warehousing and storage
- Confectionery production
- Electronic component manufacture & assembly
- Pharmaceutical production
- Chemical plants
- The extremely robust aggregates used to provide the texture of Ucrete DP and are designed to maintain optimum slip resistance for many years. Where there is heavy hard wheeled traffic it is recommended that Ucrete DP 30 is used.

## Characteristics and Benefits

- Expert application - installed only by trained specialist contractors.
- Fast application and reduces downtime - quick two step application, no need for scratchcoat in most cases. Can be applied to 7 -day-old concrete or 2day old polymer screeds.

- Fast return to service - 8 hour access to foot traffic; 24 hours for vehicles at 23°C.
- Suitable for application and use in food production facilities - non-tainting, non-dusting, unaffected by constantly wet floors or common food chemicals and microbiologically inert.
- High chemical resistance - resists a wide range of organic and inorganic chemicals such as acids, alkalis, amines, salts and solvents.
- High mechanical resistance - wear and high abrasion resistance due to use of calcined aggregates.
- High impact resistance – will dent rather than star crack like epoxies maintaining floor integrity in harsh environments.
- Resistant to thermal cycling - similar coefficient of thermal expansion to concrete.
- High Tg - keeps physical characteristics from -25°C up to +130°C.
- Durable/long life - more than 40 years of international use.
- Slip resistance – defined Profile (DP) surface provides anti-slip surface Ucrete DP 10-R11, Ucrete DP 20-R13 and Ucrete DP 30-R13.
- Colours – Grey, Cream, Yellow, Green, Red, Light Green and Light Grey.

## Accreditation

- Ucrete has approval for use as flooring for HACCP accredited facilities.
- Ucrete conforms to The Leadership in Energy & Environmental Design Green Building Rating System LEED® being sustainable and environmentally friendly flooring materials.
- Ucrete floors have obtained the Indoor Air Comfort Gold certificate from Eurofins, with the low levels of emissions to the air and non-tainting properties.
- Ucrete complies with the U.S. Department of Agriculture (USDA) standards for use in federally inspected meat and poultry plants in the USA.



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## Properties

Slip resistance* – <b>Ucrete DP 10</b>	P4	
<b>Ucrete DP 20</b>	P5	
<b>Ucrete DP 30</b>	P5	
Slip resistance* – DIN 51130 <b>Ucrete DP 10</b>	R11	----
<b>Ucrete DP 20</b>	R13	V4
<b>Ucrete DP 30</b>	R13	V8
Compressive Strength	48-58 MPa	
Flexural strength (ISO 178)	12 – 14 MPa	
Tensile strength (ISO R527)	5 - 7 MPa	
Adhesive strength (BS6319:Part 4)	Concrete failure	
Thermal expansion (ASTM C531:Part 4.05)	4x10 <sup>-5</sup> °C <sup>-1</sup>	
Thermal conductivity (BS 874)	1.1 W/m °C	
Water Adsorption (CP.BM 2/67/2)	0 mL	
Fire Testing (EN13501: Part 1)	B <sub>FL</sub> – S <sub>1</sub>	
Thickness range	Service temperatures	
4mm	-15°C to 70°C	
6mm	-25°C to 80°C	
9mm	-25°C to 120°C	

Samples cured for 28 days at 20°C.

\*Optimum slip resistance can only be maintained with regular cleaning. 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.

## Substrate Moisture Tolerance

Ucrete is extremely tolerant to residual substrate moisture and can be installed directly onto 7 day old concrete, or onto sound existing concrete (slab on ground) with high moisture contents without the use of special primers provided there is a functioning damp proof membrane below the slab. This enables rapid refurbishment work in wet process areas. Epoxy surface DPMs offer no benefit and should not be used 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 colours.

## Application

For detailed information about application, please obtain a copy of the Ucrete Application Manual from your local representative or our website.

## Estimating Data

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

Grade & Thickness	Consumption (kg/m <sup>2</sup> )
<b>Ucrete DP 10 @ 4mm</b>	
Ucrete BASECOAT BC4	6 – 8
Filler F10	4 – 5
Ucrete TC	0.4 – 0.6
<b>Ucrete DP 10 @ 6mm</b>	
Ucrete BASECOAT BC6	10 – 12
Filler F10	4 – 5
Ucrete TC	0.4 – 0.6
<b>Ucrete DP 10 @ 9mm</b>	
Ucrete BASECOAT BC9	16 – 18
Filler F10	4 – 5
Ucrete TC	0.4 – 0.6

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Ucrete DP 20 @ 4mm	
Ucrete BASECOAT BC4	6 – 8
Filler F20	4 – 5
Ucrete TC	1 – 1.2
Ucrete DP 20 @ 6mm	
Ucrete BASECOAT BC6	10 – 12
Filler F20	4 – 5
Ucrete TC	1 – 1.2
Ucrete DP 20 @ 9mm	
Ucrete BASECOAT BC9	16 – 18
Filler F20	4 – 5
Ucrete TC	1 – 1.2
Ucrete DP 30 @ 4mm	
Ucrete BASECOAT BC4	6 – 8
Filler F25	4 – 5
Ucrete TC	1 – 1.2
Ucrete DP 30 @ 6mm	
Ucrete BASECOAT BC6	10 – 12
Filler F25	4 – 5
Ucrete TC	1 – 1.2
Ucrete DP 30 @ 9mm	
Ucrete BASECOAT BC9	16 – 18
Filler F25	4 – 5
Ucrete TC	1 – 1.2

## Storage

Store 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.

## Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

## Packaging

Ucrete DP is supplied in three different grades and consists of Basecoat, Filler & Topcoat as follows:

	Pack size in kg			
	Pt 1	Pt 2	Pt 3	Pt 4
Ucrete Basecoat BC4	2.52	2.86	13	0.5
Ucrete Basecoat BC6			17.3	
Ucrete Basecoat BC9			21	
Ucrete TC	0.765	1.09	1.36	0.5
Ucrete TC Gloss	0.83	1.09	1.36	0.5
Filler F10/F20/F25	25kg bags			



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## Disclaimer

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### STATEMENT OF RESPONSIBILITY

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