

UCRETE[®] HPQ

Heavy Duty Polyurethane Coloured Quartz Screed

Unique HD Polyurethane resin technology with an attractive coloured quartz screed finish

Description of Product

UCRETE[®] HPQ provides a robust 4-6mm thick coloured quartz floor finish suitable for applications in wet and dry process environments

It is dense and impervious providing the ideal floor finish for applications in pharmaceutical production facilities, clean room areas, amenity rooms, retail, commercial and industry environments and wherever an attractive floor is required.

The high quality epoxy Lockcoat EP finish provides for the highest aesthetic standards and ease of cleaning.

For areas where high chemical resistance is required a high performance polyurethane Lockcoat is available.

UCRETE[®] Industrial Flooring has been widely used throughout industry for more than 30 years, many of the older floors are still in service. A detailed project reference list is available upon request.

Colours

UCRETE[®] HPQ is available in ten attractive colour quartz blends.

Performance Data

Impact Resistance

With high mechanical strengths and a low elastic modulus, UCRETE[®] HPQ is very resilient and able to withstand severe impact loads. While no material is indestructible and surface shipping may occur, brittle modes of failure resulting cracking and disbondment are unknown with UCRETE[®] floors.

Permeability

UCRETE[®] HPQ exhibits zero absorption when tested to CP.BM2/67/2.

UCRETE[®] HPQ is dense and impervious throughout its thickness preventing liquid ingress even at anchor bolts and other penetrations.

Technical Data

Density (BS 6319:Part 5), Kg/m ³	2000 - 2090
Compressive strength (BS 6319:Part 2), MPa	48 - 54
Tensile strength (ISO R527), Mpa	5-7
Flexural strength (ISO 178), Mpa	12 - 14
Compressive modulus (BS 6319:Part 6), Mpa	3250 - 5000
Adhesive strength (BS6319:Part 4)	concrete failure
Thermal expansion (ASTM C531:Part 4.05), °C ⁻¹	2 - 6 x 10 ⁻⁵
Thermal conductivity (BS 874), W/m. °C	1.1
Surface spread of flame (BS 476:Part 7)	Class 2

Slip Resistance

Typical values for the coefficient of friction as determined using the TRRL slip resistance tester with 4S rubber on the wet floor as follows:

With Lockcoat EP	30 – 40
With Lockcoat PU	35 – 45

Heavy hard wheeled traffic will reduce the slip resistance of UCRETE[®] HPQ floors.

Optimum slip resistance can only be maintained with regular cleaning.



The Chemical Company

Cleaning

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

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 concrete 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.

Chemical Resistance

UCRETE® HPQ will resist spillages of:

- dilute mineral and organic acids
- salts and salt solutions
- dilute alkalis
- fats, oils and sugars
- mineral oils

For maximum chemical and solvent resistance use UCRETE® Lockcoat PU. The separate data sheet 'A guide to the chemical resistance of UCRETE® Flooring' refers.

For detailed information, please contact your local BASF Construction Chemicals office for guidance.

Non Tainting

The UCRETE® HPQ systems are solvent free and non-tainting.

Temperature Resistance

UCRETE® HPQ floor is fully resistant to liquid spillage and discharge up to 60°C.

A 6mm UCRETE® HPQ floor with the polyurethane Lockcoat PU will withstand liquid spillages and discharge up to 70°C.

Specification

The floor finish shall be UCRETE® HPQ, from BASF Construction Chemicals of 19 Broad Ground Road, Redditch, Worcestershire, B98 8YP, installed at 4/6*mm in accordance with the manufacturers' instructions and finished with UCRETE® Lockcoat EP/PU*

**(select as required)*

Substrate Quality

Concrete substrates should be visibly dry and have a minimum tensile strength of 1.5Mpa. Refer to the guide 'The Design and Preparation of Substrates for UCRETE® Industrial Flooring'

All joints in the substrate concrete subject to movement should be reflected through the UCRETE® HPQ floor and sealed with a suitable sealant.

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.

Application Conditions

For best results materials, substrate and air temperature should be in the range of 15-25°C. Whilst UCRETE® HPQ 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.

Condensation and low temperatures can cause a white bloom on the Lockcoat.

Curing

Normally, UCRETE® HPQ floors can be put into service after 24 hours.

Disposal

UCRETE® 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.

BASF Construction Chemicals (UK) Ltd,
Albany House,
Swinton Hall Road, Swinton,
Manchester M27 4DT
Tel: +44 (0) 161 794 7411
Fax +44 (0) 161 727 8547
www.basf-cc.co.uk



The Chemical Company

UCRETE® HPQ BASF Construction Chemicals UK Ltd Version 3, July 2006

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, e.g. when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

Powder Products

Should be handled to minimise dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes which should be protected during use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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