

Technical Data Sheet

33.06.407E – 07/06

® KERANOL FU 115

Synthetic resin-based jointing mortar for heavily stressed ceramic tiling

Description

KERANOL FU 115 is a triple-component jointing mortar based on furan resin, which is free of furfural.

Typical uses

KERANOL FU 115 is recommended as a jointing mortar for ceramic tiling, particularly for those exposed to heavy chemical loads, such as acids, alkaline solutions or organic solvents. The primary spectrum of application is for ceramic surfaces in plants operated by the chemical industry, in neutralisation plants, in traffic or reloading areas or in process and waste water treatment facilities.

Properties

KERANOL FU 115 exhibits excellent mechanical properties as well as a high resistance to chemicals, in particular to solvents and other organic substances.

The application of black coloured KERANOL FU 115 as jointing mortar allows a smooth finish and visually attractive appearance.

When compared to commercially available mortars the furfural-free composition of KERANOL FU 115 considerably increases environmental impact in a positive direction.

Chemical resistance

Information on the chemical resistance properties will be provided on request.

Substrate

The substrate is defined as the ceramic bedding material (e.g. bedding mortar such as KERANOL FU 315 or cement mortar) and acid-proof split tiles.

Surface pretreatment

The joints must be free of any substances that may act as separating agents as well as all impurities. The tile surface must be protected with the aid of KCH separating varnish 3 and KCH separating varnish 1 prior to applying the adhesive cement.

Application

KERANOL EP 115 consists of a triple-component mortar compound.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
KCH FU solution 2	100	2.00
KCH FU powder 9	250	4.20
FU hardener 2	5	0.09

Pack mortar mixture into the joints. Work the compound thoroughly into the joints and smooth out the surface by means of a rubber-faced spreader. Scrape off the varnish once the mortar has hardened.

Pot life

Temperature	KERANOL EP 115
15°C	~ 35 minutes
20°C	~ 25 minutes
30°C	~ 10 minutes

Coverage

KCH separating varnish 3: approx. 0.05 kg/m²
KCH separating varnish 1: approx. 0.3 kg/m² per application

Jointing mortar:

Split tiles 240 x 115 x 15 approx. 2.5 kg/m²
Split tiles 240 x 115 x 20 approx. 3.5 kg/m²
Split tiles 240 x 115 x 25 approx. 4.5 kg/m²
Split tiles 240 x 115 x 30 approx. 5.0 kg/m²

Packing

The following standard quantities are available:

KCH FU solution 2 20 kg
KCH FU powder 9 25 kg
KCH FU hardener 2 10 kg
KCH separating varnish 1 10 kg
KCH separating varnish 3 5 kg

Storage

The products shall be stored in a cool and dry place. With a storage temperature of 23°C the minimum shelf life is as follows:

KCH FU solution 2	24 months
KCH FU powder 9	24 months
KCH FU hardener 2	12 months
KCH separating varnish 1	12 months
KCH separating varnish 3	4 months

Higher temperatures will shorten the shelf life of this products. The packaging drums are to be kept tightly shut and are to be resealed each time material has been removed. All liquid products must be stored frost-free.

Safety

Adequate ventilation is to be provided while work is in progress. Ventilation is compulsory for all work carried out in pits and closed rooms.

All vapours that are produced while work is in progress must be continuously suctioned off at floor or bottom level.

Only the amount of material effectively required to continue work is to be stored at the working place. The instructions for the prevention of fire and explosion are to be observed if required.

Please note and ensure that even the smallest quantities of the individual components and/or prepared mixtures are not allowed to reach the sewerage.

All regulations for the prevention of accidents stipulated by the employer's liability assurance association, the regulations for the prevention of accidents prescribed at the site of application and the TRGS 507 „Surface treatment in rooms and tanks“, as well as the safety precautions listed on the packing (label) required by the provisions of the Hazardous Materials Ordinance shall be adhered to. The operating instructions pursuant to § 14 GefStoffV as well as the EC safety data sheets are to be complied with.

Technical data	Test specification	Unit	Parameter
Density	DIN EN ISO 1183-1	g/cm ³	1.8
Compressive strength	DIN EN ISO 604	MPa	75
Tensile strength	DIN EN ISO 527	MPa	10
Flexural strength	DIN EN ISO 178	MPa	25
E-module (flexural)	DIN EN ISO 178	MPa	5,500
Adhesiveness to tile/bricks	DIN EN 24624	MPa	> 4
Ball indentation hardness (H 358/30)	DIN 53456	MPa	100
Dissipation Resistivity (to ground)	DIN EN ISO 1081	Ω	> 10 ⁹
Linear thermal expansion coefficient	DIN 53752	K ⁻¹	30 · 10 ⁻⁶
Max. operational temperature		°C	100

The technical data contained herein represents the current state of our product knowledge and is intended to furnish general information regarding our products and their application spectrum. In view of the diversity and multitude of application possibilities, this data should be regarded solely as general information, which does not guarantee any specific properties and/or suitability of these products for each concrete case of application. Consequently, when ordering a product, please contact us for detailed information relative to the properties required for a specific application. Our technical service will, upon request, furnish a profile of characteristics for the concrete application without delay.

KCH GROUP GmbH

P.O. Box 11 63, D-56425 Siershahn

Phone: +49 (0) 2623-600-0 / Fax: +49 (0) 2623-600-433 / eMail: info@kch-group.com

تلفن: ۰۴-۲۲۶۴۶۷۸۳ و ۰۱۰-۲۲۶۳۰۶۰۸

شرکت کسری نماینده رسمی KCH آلمان