

Technical Data Sheet

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® KERANOL FU 325

Electrically dissipating synthetic resin based bedding and jointing mortar for heavily stressed ceramic surfaces and ceramic brick linings

Description

KERANOL FU 325 is a three-component silicate-free synthetic resin mortar based on furan resin. It is electrically dissipating and is also furfural-free.

Typical uses

KERANOL FU 325 is recommended as a bedding and jointing mortar for ceramic surfaces and masonry that are subjected to aggressive media. KERANOL FU 325 is applied specifically where permanent loads such as hydrofluoric acid or strong alkaline solutions are present at high temperatures. Its main spectrum of application is for ceramic tiling and brick linings in plants operated by the chemical industry, in plants producing phosphoric acid as well as in acid pickling plants. In view of its electrically dissipation ability, this product is also highly recommended for use in all areas where sparking must be prevented due to a potential explosion hazard.

Advantages

KERANOL FU 325 exhibits excellent mechanical properties as well as a high chemical resistance, particularly to hydrofluoric acid, strong alkaline solutions and organic solvents. When compared to commercially available mortars the furfural-free composition of black coloured KERANOL FU 325 considerably increases environmental impact in a positive direction.

Chemical resistance

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

Substrate

KERANOL FU 325 can be applied to rubber linings, synthetic resin coatings as well as acid-proof ceramic materials.

Surface pretreatment

The surface must be free of any substances that may act as separating agents as well as any impurities.

Application

KERANOL FU 325 consists of a three-component mortar mixture.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
KCH FU solution 2	100	2.00
KCH FU powder 7L	300	7.90
KCH FU hardener 2	7	0.13

Pot life

Temperature	KERANOL FU 325
15°C	~ 75 minutes
20°C	~ 60 minutes
30°C	~ 45 minutes

Coverage

bedding and jointing (bed joint 5mm / cross joint 7mm):
 Split tiles 240 x 115 x 20 approx. 14 kg/m²
 Split tiles 240 x 115 x 40 approx. 17 kg/m²
 Bricks 240 x 115 x 65 approx. 21 kg/m²
 Bricks 240 x 115 x 65 approx. 23 kg/m²

Packing

The following standard quantities are available:

KCH FU solution 2	20 kg
KCH FU powder 10L	25 kg
KCH FU hardener 2	10 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 10L	24 months
KCH FU hardener 2	12 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	65
Tensile strength	DIN EN ISO 537	MPa	10
Flexural strength	DIN EN ISO 178	MPa	20
E-module (flexural)	DIN EN ISO 178	MPa	6,000
Adhesive strength to concrete/screed*)	DIN EN 24624	MPa	> inherent strength of substrate
Adhesiveness to tile/bricks	DIN EN 24624	MPa	> 4
Ball indentation hardness (H 358/30)	DIN 53456	MPa	110
Dissipation Resistivity (to ground)	DIN EN ISO 1081	Ω	< 10 ⁶
Linear thermal expansion coefficient	DIN 53752	K ⁻¹	30 · 10 ⁻⁶
Max. operational temperature		°C	140

*) compressive strength 25 MPa, surface primed

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.

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