

## Technical Data Sheet

33.06.414E – 07/06

### ® KERANOL EP 310

#### Synthetic resin based bedding and jointing mortar for industrial corrosion protection

##### Description

KERANOL EP 310 is a triple-component bedding and jointing epoxy resin based mortar containing mineral fillers.

##### Typical uses

KERANOL EP 310 is recommended as a bedding and jointing compound for tiling and brick linings that are subjected to aggressive and, in particular alkaline, media as well as salt solutions.

KERANOL EP 310 is especially well suited for application in areas where the corrosion protection system must withstand average temperature ranges and stress conditions.

Its primary spectrum of application is for tiling and brick linings in plants operated by the chemical industry, in treatment facilities for waste water and process water as well as in swimming pools and sole baths.

##### Properties

KERANOL EP 310 has excellent mechanical properties and is resistant to chemicals.

Additionally to its resistance to alkaline substances and saline solutions, its suitability to a large number of inorganic compounds and aliphatic hydrocarbons is to remark. KERANOL EP 310 hardens with no volume shrinkage. The mortar is available in natural colour tone.

##### Chemical resistance

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

##### Substrate

The substrate is defined as a respective sealing layer and acid-proof ceramic material.

##### Surface pretreatment

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

##### Application

KERANOL EP 310 consists of a triple-component mortar compound which is suitable for bedding as well as hollow-joint laying of ceramic material.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
KCH EP solution 2	100	2.00
KCH EP hardener 8	14	0.34
KCH powder 51	430	6.90

##### Pot life

Temperature	KERANOL EP 310
15°C	~ 75 minutes
20°C	~ 60 minutes
30°C	~ 35 minutes

##### Coverage

bedding and jointing (bed joint 5mm / cross joint 7mm):

Split tiles 240 x 115 x 20	approx. 15 kg/m <sup>2</sup>
Split tiles 240 x 115 x 40	approx. 19 kg/m <sup>2</sup>
Bricks 240 x 115 x 65	approx. 23 kg/m <sup>2</sup>
Bricks 240 x 115 x 65	approx. 26 kg/m <sup>2</sup>

##### Packing

The following standard quantities are available:

KCH EP solution 2	20 kg
KCH EP hardener 8	5, 20 kg
KCH powder 51	25 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 EP solution 2	12 months
KCH EP hardener 8	12 months
KCH powder 51	24 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 <sup>3</sup>	2.0
Compressive strength	DIN EN ISO 604	MPa	100
Adhesiveness to concrete/screed <sup>*)</sup>	DIN EN 24624	MPa	> inherent strength substrate
Adhesiveness to tile/bricks	DIN EN 24624	MPa	> inherent strength substrate
Dissipation Resistivity (to ground)	DIN EN ISO 1081	Ω	> 10 <sup>9</sup>
Linear thermal expansion coefficient	DIN 53752	K <sup>-1</sup>	35 · 10 <sup>-6</sup>
Max. operational temperature		°C	80

<sup>\*)</sup> compressive strength 25 MPa

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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