

## Technical Data Sheet

33.06.430E – 07/06

### ® KERANOL VE 121

#### Electrically discharging jointing mortar based on synthetic resins for tile linings exposed to severe process conditions

##### Description

KERANOL VE 121 is a three-component jointing mortar based on vinyl ester resin (Novolak). Owing to the fine fillers utilized, it is suitable for the jointing of relatively narrow joints, such as tile linings using hexagon tiles for example which are subsequently abraded and polished.

##### Typical uses

KERANOL VE 121 is recommended as a jointing material for tile linings exposed to aggressive acids or solvents.

KERANOL VE 121 is predominantly used in applications for areas exposed to high temperatures and chemical media, which also require flooring surfaces to be electrically discharging. Such applications would include, for example, all areas where highly flammable liquids are handled, which would necessitate an explosion-proof execution. The principal range of application covers hexagonal tile floorings in chemical process plants, food and beverage plants as the pharmaceutical industry.

##### Properties

KERANOL VE 121 exhibits good mechanical properties and provides excellent chemical resistance even when exposed to extreme temperatures. Its electrically discharging properties prevent the occurrence of hazardous electrostatic charging. It is particularly recommended where high degrees of surface smoothness and aesthetic appearance are required. This mortar is also suitable for application in tile linings that have been subsequently sanded and is applied in a black colour tone.

In addition to its resistance to inorganic acids, it is also highly resistant to a broad spectrum of organic compounds (solvents, organic acids).

##### Chemical resistance

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

##### Substrate

The substrate consists of the tile bedding material (bedding mortar: e.g. KERANOL VE 311) and hexagonal stoneware tiles.

##### Surface pretreatment

The joints must be free from parting compounds and impurities.

##### Application

KERANOL VE 121 consists of a three-component mortar compound.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
KCH VE Solution 35	100	2,00
KCH UP hardener 1	2	0.04
KCH powder 45L	30	1.40

Work the jointing compound into the joints, pressing it down and smoothing it out with a rubber jointing/smoothing tool. Remove the separating varnish once the mortar has hardened.

Abrading and polishing shall be done after a waiting period of at least 3 days.

##### Pot life

Temperature	KERANOL VE 121
15°C	approx. 70 minutes
20°C	approx. 50 minutes
30°C	approx. 30 minutes

##### Coverage

Jointing mortar for hexagonal tiles:

approx. 2.2 kg/m<sup>2</sup>

##### Packing

The products are shipped in the following standard packing units:

KCH VE solution 35	20 kg
KCH UP hardener 1	0.04 kg
KCH powder 45L	20 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 VE solution 35	3 months
KCH VE solution 35 < 15 °C	6 months
KCH UP hardener 1	6 months
KCH powder 45L	24 months

Higher temperatures will shorten the shelf life of these products. The packing units are to be kept tightly sealed and are to be resealed each time materials have been removed. All liquid products are to be stored in a frost-free environment.

**Safety**

Adequate ventilation shall be provided during the execution of all work.

Ventilation is compulsory for all work carried out in pits and closed rooms.

All vapours that are produced during processing must be continuously suctioned off at floor or bottom level.

Only such 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 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 53479	g/cm <sup>3</sup>	1.65
Compressive strength	DIN EN ISO 604	MPa	65
Modulus of elasticity (compression test)	DIN EN ISO 604	MPa	6.500
Adhesive strength <sup>*)</sup>	DIN EN 24624	MPa	> 3
Hardness	DIN 53505	Shore D	75
Leakage resistance to earth	DIN EN ISO 1081	Ω	< 10 <sup>6</sup>
Linear thermal expansion coefficient	DIN 53752	K <sup>-1</sup>	35 · 10 <sup>-6</sup>
Maximum service temperature		°C	120

<sup>\*)</sup> to vinylester resin sealing layer

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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