

Alkadur K 75

Highly chemical resistant synthetic resin mortar for bedding and jointing of acid resistance brick or tile linings.

Base

Epoxy resin

Material Group

Mortars, Jointing Materials

Description

3-component synthetic resin based system for jointing and bedding ceramic brick and tile linings.

Use

Bedding and jointing of acid resistant brick or tile linings.

Physical Data

Property (unit), Test method	Value
Density (g/cm ³), DIN EN ISO 1183-1, ASTM D 792	2.3
Flexural strength (MPa), DIN EN ISO 178, ASTM C 580	49.0
Compressive strength (MPa), DIN EN ISO 604, ASTM C 579	137
Modulus of elasticity (MPa), DIN EN ISO 178, ASTM C 580	16,200
The thermal coefficient of linear expansion (1/K), ISO 11359-2, ASTM C 531	2.8 x 10 ⁻⁵
Tensile Strength (MPa), DIN EN ISO 527, ASTM C 307	20.0
Adherence to steel (MPa), DIN EN ISO 4624	11
Temperature resistance (°C)	60 °C
Lowest working temperature (°C)	15
Maximum working temperature (°C) (cool material to 20 °C)	30

Chemical Resistance

Good resistance against fuel, fats, oils and salt solutions as well as to diluted acids and alkalis.

For detailed information about the chemical resistance please refer to Technical Information 330.

Substrate

The system can be applied to dry, clean and grease-free substrates like steel, concrete, screed and masonry substrates.

Usually it is applied onto lining systems and rubber linings of the Steuler-KCH program.

Concrete / screed

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.

To attain a sufficient adhesive tensile strength, the substrate is generally to be pretreated in such a way that it is free of cement slurry, cement skin, loose and crumbly particles, structure imperfections and separating substances.

Steel

Refer to DIN EN14879-1 as well as to STEULER-KCH-Formblatt 020.

The steel surface shall be sandblasted to a metallic bright finish. A preparation degree of SA 2 ½ as specified in DIN EN ISO 12944-4 and a roughness grade "medium (G)" as specified in DIN EN ISO 8503-1 must be achieved; minimum surface roughness R_z = 70 µm. After blasting, a new formation of rust is to be avoided by appropriate procedures, e. g. immediate application of a primer.

Moisture

Residual moisture content of concrete substrate must not exceed 4 %.

During application, the substrate must be kept absolutely dry. Uncured material has to be protected from any kind of moisture (condensation, fog, precipitation or other water source). Distance to dew point has to be at least 3 K, at a relative humidity of above 70 % at least 5 K.

System Design

▲ Alkadur K 75 Primer

▲ Alkadur K 75

Packaging / Shelf life

The products shall be stored and transported in a cool and dry place. Shelf life is specified for a storage temperature of 20 °C. Higher temperatures reduce, lower temperatures increase the shelf life.

Components	Colour approx.	Item number	Package	Content	Shelf life
Alkadur-K75-Solution 1		5035223007	Bottle	1 kg	12 months
Alkadur-K75-Solution 2		5035224003	Bucket	5 kg	24 months
Alkadur-K75-Powder		5011012063	Bag	36 kg	24 months
Cab-O-Sil TS720		5011016044	Pouch	0.5 kg	24 months

Mixing Ratio / Consumption

Alkadur K 75 Primer

	Part by weight	Part by volume
Alkadur-K75-Solution 1	1.0	1.0
Alkadur-K75-Solution 2	5.0	4.5
Consumption	approx. 0.300 kg / m ²	
Work steps	1	

Alkadur K 75 as Lay- and Jointing cement

	Part by weight	Part by volume
Alkadur-K75-Solution 1	1.0	1.0
Alkadur-K75-Solution 2	5.0	4.5
Alkadur-K75-Powder	36	25
Consumption	2.310 kg / liter mortar mass	

Add 10 % buffer to the calculated project demand for bedding and jointing.

Alkadur K 75 as bedding mortar (thin bed method)

	Part by weight	Part by volume
Alkadur-K75-Solution 1	1.0	1.0
Alkadur-K75-Solution 2	5.0	4.5
Alkadur-K75-Powder	21 - 24	14.6 - 16.8
Cab-O-Sil TS 720	0.16	
Consumption	1.738 – 1.930 kg / liters mortar mass	

Add 10 % buffer to the calculated project demand for bedding and jointing.

Waiting Times

Primer and Mortar

Waiting times to support foot traffic depend on the temperature and are as follows:

12 °C	minimum 16 h
20 °C	minimum 10 h
30 °C	minimum 6 h

After that the laying and jointing work can be started.

Working Times

The working times depend on the temperature and are as follows:

12 °C	approx. 90 minutes
20 °C	approx. 40 minutes
30 °C	approx. 12 minutes

Safety measures

Mix and apply material only in well ventilated areas. Provide ventilation suited to the conditions when working in pits or tanks. Do not smoke!

Do not expose materials to heat or open flame. This applies in particular to welding works (weld beads). Avoid direct contact of the material with the skin. Wash hands with soap and water; do not clean the skin with solvents. Use barrier soap and protective creams on exposed skin areas. In all other respects comply with the relevant regulations for prevention of accidents.

Refer to the Safety Data Sheets!

GISCODE

Product	GISCODE
Alkadur K 75 Primer	RE 1
Coating Alkadur K 75	RE 1

Cleaning of Equipment

Working tools which are contaminated with not fully cured material can be cleaned with Steuler Universal Cleaner, Technical Information 190.

Cleaning, Maintenance

Please refer to Technical Information 198 „Cleaning Advice for STEULER-KCH-Industrial Floors“.

All information contained in this Technical Information sheet is based on the present state of our knowledge and practical experience. All data are approximate values for guidance only. A legally binding warranty of certain characteristics or the suitability for a certain purpose of use cannot be derived from this.

The information given in this Technical Information sheet is our intellectual property. The Technical Information sheet may neither be copied nor used by unauthorized parties, nor professionally distributed or otherwise made accessible to third parties without our prior consent.

This issue replaces all previous versions.