

## TI 355

Technical Information Surface Protection Linings  
Issue 18.09.2019

# ALKADUR CONCRETE

Synthetic resin compound for the production of moulded parts and for the coarse levelling of concrete substrates.

### Base

Epoxy resin

### Material Group

Primers, levelling compounds

### Description

Highly filled synthetic resin based mass which is mainly used for the production of moldings or as rough levelling coat for concrete substrates.

### Use

Levelling and filling of concrete and screed surfaces especially as a substrate for subsequent synthetic resin based coating systems.  
Production of moldings.

### Properties

- Resin binding agent
- liquid-tight
- jointless application
- Low shrinkage
- good chemical and mechanical resistance
- Quick commissioning
- Layer thickness from 4.0 mm
- thermal resistance up to 80 °C

### Physical Data

Property (unit), Test method	Value
Density [g/cm <sup>3</sup> ], DIN EN ISO 1183-1, ASTM D 792	2.1
Compressive strength [MPa], DIN EN ISO 604, ASTM C 579	95.0
Shore D hardness, DIN 53505, ASTM D 2240	80.0
Tensile Strength [MPa], DIN EN ISO 527, ASTM C 307	15.0
Thermal conductivity [W/mK], ISO DIS 22007	0.7
The thermal coefficient of linear expansion [1/K], ISO 11359-2, ASTM C 531	30 x 10 <sup>-6</sup>
Data are mean values	

### Chemical Resistance

For detailed information about the chemical resistance please refer to Technical Information TI 230.

Please refer to the column ALKADUR DFG.

## Substrate

### 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.

The residual moisture of cementitious substrates must not exceed 4 %.

### Moisture

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 DFG Primer (not for moldings)
- Alkadur Concrete

## Packaging / Shelf life

All components must be stored and transported dry and frost-free. The minimum storage life applies to a storage temperature of 20 °C, unless otherwise specified. Higher temperatures reduce, lower temperatures increase the shelf life.

Components	Item number	Package	Content	Shelf life
Alkadur-DFG/V-Solution 1	5035120011	Jug	3 kg **	24 Months
Alkadur-DFG-Solution 2 unpigmented	5035122004	Drum	6 kg **	24 Months
Alkadur-AGM-Powder	5011001101	Bag	22.5 kg	24 Months
SKC-Filler 16	5011203001	Bag	25 kg	24 Months
SKC-Filler 21	5011208001	Bag	25 kg	24 Months
Filler A2	5011124001	Bag	25 kg	24 Months
Filler B2	5011108001	Bag	25 kg	24 Months
Filler C2	5011123001	Bag	25 kg	24 Months
Cab-O-Sil TS720	5011016006	Bag	10 kg	24 Months
Cab-O-Sil TS720	5011016003	Bag	5 kg	24 Months

\*\* predosed packaging

For handling, transport and storage observe the relevant material safety data sheets.

## Mixing Ratio / Consumption

### Alkadur DFG Primer

	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.0	1.0
Alkadur-DFG-Solution 2	2.0	1.8
Consumption	0.250 kg/m <sup>2</sup>	
Work steps	1	
Layer thickness	approx. 0.1 mm	
<b>Option</b>		
Spreading with SKC-Filler 16; consumption: approx. 1.500 kg/m <sup>2</sup>		

## Alkadur Concrete

Mixture 1 (from approx. 8 mm thickness)	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	1.0
Alkadur-DFG-Solution 2	2.00	1.8
Alkadur-AGM-Powder	12.00	8.00
SKC-Filler 21	12.00	8.40
Consumption per 1 l = 1 mm/m <sup>2</sup> : 2.100 kg		
Mixture 2 (from approx. 8 mm thickness)	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	1.0
Alkadur-DFG-Solution 2	2.00	1.8
Filler C2	16.00	10.00
SKC-Filler 21	8.00	5.50
Consumption per 1 l = 1 mm/m <sup>2</sup> : 2.100 kg		
Mixture 3 (from approx. 6 mm thickness)	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	1.0
Alkadur-DFG-Solution 2	2.00	1.8
Filler B2	18.00	11.43
Consumption per 1 l = 1 mm/m <sup>2</sup> : 2.050 kg		
Mixture 4 (from approx. 4 mm thickness)	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	1.0
Alkadur-DFG-Solution 2	2.00	1.8
Filler A2	18.00	11.43
Consumption per 1 l = 1 mm/m <sup>2</sup> : 2.050 kg		
Mixture 5 (potting compound)	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	1.0
Alkadur-DFG-Solution 2	2.00	1.8
Filler A2	4.50	2.90
Cab-O-Sil TS720	0.02	0.40
Consumption 1.750 kg / liter		

## Waiting Times

Alkadur Concrete will be applied on to the fresh Alkadur DFG Primer.

In case of installing solvent-based systems on the surface of ALKADUR CONCRETE -at least 24 h at 20 ° C.

## Pot Life

Pot life depends on temperature:

20 °C	approx. 40-45 minutes
-------	-----------------------

## Curing times

To support foot traffic depending on temperature approx. 8 – 10 h.

## Safety and Disposal

- Sufficient aeration and de-aeration (especially in tanks and pits).
- No smoking/no fire
- Refer to the Safety Data Sheets
- Observe danger references and safety recommendation labels.
- Wear required personal protective equipment (avoid skin contact with materials)
- Clean and protect hands with skin protective soap and skin protection cream (no solvents)
- Wear a dust mask when sanding (e.g. for repairs).
- Instructions as per § 14 of GefahrstoffV (Toxic Substances Act) and TRGS 507 (Technical regulations for Hazardous Substances - Germany)
- Accident precautions issued by the Liability Insurance Association for the Chemical Industries (Germany)

Do not expose materials to heat or open flame, this applies in particular to welding works (weld beads).

Preferably consume residual quantities. Do not pour into a spout or dustbin! Collect separately for disposal in durable, lockable and labeled containers.

## GISCODE

Product	GISCODE
Alkadur DFG Primer	RE 1
Alkadur Concrete	RE 1

## Cleaning of Equipment

Tools soiled with uncured materials can be cleaned with STEULER UNIVERSAL CLEANER (Technical Information TI 190). Only clean in well ventilated areas.

18014400059839243 • V 3 • en

All information contained in this Technical Information 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 is our intellectual property. The Technical Information 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.