

# ALKADUR DFG LF

Self-levelling, electrically conductive coating system for concrete / screed substrates.

## Base

Epoxy resin

## Material Group

Floor coatings - Leveling compounds

## Description

Self-levelling, plain-coloured, electrically conductive coating system for concrete and screed substrates. The system is wear resistant and has dust rejecting properties. The system shows a good chemical resistance.

The surface is smooth.

## Use

Coating of floor areas where good chemical resistance and an easy-to-clean surface are required and where the coating has to be electrically conductive, e. g. in production and handling areas of the chemical industry, in storehouses and factory buildings, in workshops and power plants.

## Properties

- Self-levelling
- electrically conductive
- plain-coloured
- jointless
- smooth, easy-to-clean surface

## Physical Data

Property (unit), Test method	Value
Electrical leakage resistance [Ohm] to DIN EN 14879-3 at a relative humidity of > 70 %, ASTM F 150/98	$\leq 10^6$
Density [g/cm <sup>3</sup> ], DIN EN ISO 1183-1, ASTM D 792	1.8
Compressive strength [MPa], DIN EN ISO 604, ASTM C 579	85.0
Flexural strength [MPa], DIN EN ISO 178, ASTM C 580	32.0
Tensile Strength [MPa], DIN EN ISO 527, ASTM C 307	22.0
Abrasion resistance [cm <sup>3</sup> /50 cm <sup>2</sup> ], DIN 52108, ASTM C 241	4.65
Lowest working temperature [°C]	12.0
Maximum working temperature [C]	30.0
Modulus of elasticity [MPa], DIN EN ISO 178, ASTM C 580	4300
Data are mean values	

## Chemical Resistance

Resistant to solvents, petrol, fats, oils, salts and salt solutions, diluted acids and alkalis.

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

## 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 %.

The substrate should have a temperature of approx. 10–25 °C.

### 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

- Primer with ALKADUR V (See Technical Information 132)
- Alkadur HA Filling
- Alkadur DFG Self Levelling Coating

## 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-HA-Solution 1	5035172011	Canister	3 kg **	24 Months
Alkadur-HA/Z-Solution 2	5035171004	Drum	6 kg **	24 Months
Diluent EN	5060005005	Canister	4 kg	24 Months
SKC-Filler 3L	5011194017	Bag	12.5 kg	24 Months
Alkadur-DFG/V-Solution 1	5035120011	Jug	3 kg **	24 Months
Alkadur-DFG-LF-Solution 2 RAL 7030*	5035440004	Drum	6 kg **	24 Months
Alkadur-DFG-LF-Solution 2 RAL 7031*	5035141004	Drum	6 kg **	24 Months
Alkadur-DFG-LF-Powder	5011005197	Bag	13.5 kg **	24 Months
Carbon-Fibre 6 mm	5019003202	Pouch	9 g	24 Months

\* The colours may differ slightly from the RAL colour template. Other colours on request.

\*\* predosed packaging

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

## Mixing Ratio / Consumption

### ALKADUR V Primer

	Part by weight	Part by volume
See Technical Information 132		
Consumption	approx. 0.200 – 0.350 kg/m <sup>2</sup>	

## Alkadur HA Filling

	Part by weight	Part by volume
Alkadur-HA-Solution 1	1.00	0.97
Alkadur-HA/Z-Solution 2	2.00	1.77
SKC-Filler 3L	3.00	3.33
Diluent EN	0.04	0.05
Consumption	2.265 kg/m <sup>2</sup>	
Work steps	1	
Layer thickness	approx. 1.5 mm	

## Alkadur DFG LF Self Levelling Coating

	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.00	0.97
Alkadur-DFG-LF-Solution 2	2.00	1.75
Alkadur-DFG-LF-Powder	4.50	2.80
Carbon-Fibre 6 mm	0.003	
Consumption	3.600 - 5.400 kg/m <sup>2</sup>	
Work steps	1	
Layer thickness	approx. 2.0 - 3.0 mm	

## Waiting Times

The waiting times between the individual orders depend on the temperature:

Temperature	Walkable after
15 °C	12 h
20 °C	8 h
30 °C	3 h

The maximum waiting time between operations is 24 hours at 20 °C.

## Pot Life

Pot life depends on temperature:

15 °C	approx. 70 minutes
20 °C	approx. 30 minutes
30 °C	approx. 10 minutes

## Curing times

To support foot traffic depending on temperature approx. 8 – 14 h.

The finished coating is fully mechanically and chemically resistant at 20 °C after 7 days.

## 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 V	RE 3
Alkadur HA Filling	RE 1
Alkadur DFG LF Self Levelling Coating	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.

## Cleaning and Maintenance

Observe cleaning instructions for STEULER-KCH Industrial Floors (Technical Information 198).

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This issue replaces all previous versions.