

TI 139B

Technical Information Surface Protection Linings
Issue 19.09.2019

ALKADUR AR LF

Chemical resistant, electrically conductive, structured paint system for concrete substrates and synthetic resin based systems.

Base

Epoxy resin

Material Group

Floor- / wall coatings - Coatings, impregnations

Description

Electrically conductive paint system which shows good chemical resistance. The surface is plain coloured and pigmented. The surface is non-slip.

Use

Electrically conductive paint system against drips and splashes for mechanically minor loaded concrete surfaces. Conductive, slip resistant paint system for concrete and screed substrates or for resin based substrates.

Properties

- plain-coloured
- jointless
- slip resistant surface
- electrically conductive

Chemical Resistance

Resistant to salt solutions, diluted acids, diluted alkalis, and diluted solvents.

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

Please refer to the column Alkadur DFG.

Please contact our application engineering for approval of the project-specific possible application.

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 substrate should have a temperature of approx. 12 – 25 °C.

Alkadur AR-LF can be applied on synthetic resin based coatings to obtain an anti-slip surface. Please contact our application engineering for approval of the project-specific possible application.

Moisture

The residual moisture of the substrate must not exceed 4 % for concrete.

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 HR Primer
- Alkadur HR Conductive Layer
- *Alternative: with smooth, pore free substrates, 2 x KCH EW-Primer 1 instead of Alkadur HR-Primer and Conductive Layer*
- ALKADUR AR LF

Packaging / Shelf life

All components must be stored and transported dry and frost-free. 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-HR-Priming-Solution		5035197001	Hobbock	25 kg	24 months
Alkadur-HR-Priming-Solution		5035197020	Hobbock	16 kg	24 months
Alkadur-HR-Hardener		5035198085	Bucket	8.8 kg **	24 Months
KCH-EW-Primer 1 Component A		5035450003	Bucket	5.0 kg**	12 Months
KCH-EW-Primer 1 Component B		5035005045	Can	1.25 kg**	24 Months
Alkadur-AR-LF-Solution	RAL 7032 *	5035107006	Bucket	10.0 kg	12 months
Alkadur-AR-LF-Solution	RAL 7035 *	5035199006	Bucket	10.0 kg	12 months
Alkadur-DV-Hardener		5035142006	Bucket	10.0 kg	24 months
Alkadur-DV-Hardener		5035142001	Hobbock	25.0 kg	24 months
SKC-Filler 3L		5011194017	Bag	12.5 kg	24 Months
Diluent EN		5060005005	Canister	4.0 kg	24 Months
Water					
Copper band self-adhesive		9703301015	Roll 19-20 mm wide		unlimited

* additional colours on request

** predosed packaging

Mixing Ratio / Consumption

Alkadur HR Primer

	Part by weight	Part by volume
Alkadur-HR-Priming-Solution	1.8	1.6
Alkadur-HR-Hardener	1.0	1.0
Consumption	0.250 kg / m ²	
Layer thickness	approx. 0.1 mm	
Work steps	1	

Alkadur HR Conductive Layer

	Part by weight	Part by volume
Alkadur-HR-Priming-Solution	1.80	1.60
Alkadur-HR-Hardener	1.00	1.00
SKC-Filler 3L	2.60	3.10
Diluent EN	0.04	0.05
Consumption per work step	1.200 kg / m ²	
Work steps	1	
Layer thickness	at least 0.6 mm depending on the substrate condition	

Alternatively 2 x KCH-EW-Primer 1

	Part by weight	Part by volume
KCH-EW-Primer 1 Component A	4.00	3.64
KCH-EW-Primer 1 Component B	1.00	0.90
Water	1.00	1.00
Consumption per work step	0.200 kg / m ²	
Work steps	2	
Layer thickness	approx. 0.15 mm	

ALKADUR AR LF

	Part by weight	Part by volume
Alkadur-AR-LF-Solution	10.0	6.30
Alkadur-DV-Hardener	2.05	2.00
Consumption per work step	0.450 kg / m ²	
Work steps	1	
Layer thickness	approx. 0.1 - 0.3 mm	

Waiting Times

Waiting times between the layers depend on the temperature and are as follows:

15 °C	minimum 12 h
20 °C	minimum 8 h
35 °C	minimum 3 h

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

Pot Life

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

20 °C	approx. 60 minutes
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Curing times

To support foot traffic depending on temperature approx. 3 – 12 h.

To achieve full chemical and mechanical resistance: 7 days at 20 °C.

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 skin contact with the materials. 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 HR Primer	RE 1
Alkadur HR Conductive Layer	RE 1
KCH EW Primer 1	RE 20
ALKADUR AR LF	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.

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This issue replaces all previous versions.