

TI 139A

Technical Information Surface Protection Linings
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ALKADUR AR

Chemical resistant, structured paint system for concrete- and steel substrates.

Base

Epoxy resin

Material Group

Floor- / wall coatings - Coatings, impregnations

Description

Two component system with good chemical resistance, used as paint or impregnation system. The surface is plain coloured and pigmented.

The surface is non-slip.

Use

Chemical-resistant protective coating against dripping and spraying stress for concrete and steel surfaces that are not subject to mechanical stress or only subject to minor stress, such as walls, columns and the like. Components.

Properties

- plain-coloured
- textural slip-resistant surface
- very good adherence to steel, concrete and fibre concrete

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.

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 $R_z = 70 \mu\text{m}$. After blasting, the formation of new rust must be prevented by suitable measures, e.g. immediate application of a primer.

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

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 DFG Primer
- Alkadur AR

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-DFG/V-Solution 1		5035120011	Can	3.0 kg**	24 Months
Alkadur-DFG-Solution 2 unpigmented		5035122004	Bucket	6.0 kg**	24 Months
Alkadur-AR-Solution	RAL 7032 *	5035173006	Bucket	8.3 kg**	12 months
Alkadur-DV-Hardener		5035142006	Bucket	10.0 kg	24 months
Alkadur-DV-Hardener		5035142001	Hobbock	25.0 kg	24 months

* additional colours on request

** predosed packaging

Mixing Ratio / Consumption

Alkadur DFG Primer

	Part by weight	Part by volume
Alkadur-DFG/V-Solution 1	1.0	0.97
Alkadur-DFG-Solution 2	2.0	1.74
Consumption	0.250 kg / m ²	
Work steps	1	
Layer thickness	approx. 0.1 mm	

Alkadur AR

	Part by weight	Part by volume
Alkadur-DV-Hardener	2.10	2.00
Alkadur-AR-Solution	10.00	6.70
Consumption per work step	0.400 kg / m ²	
Work steps	1	
Layer thickness	approx. 0.1 – 0.3 mm	

On smooth surfaces (eg. Leveling coatings) usually 1 work step is sufficient.

On rough surfaces (eg. Concrete or screed) at least 2 coats are to be applied.

The required design is defined by project specifications.

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:

15 °C	approx. 70 minutes
20 °C	approx. 50 minutes
35 °C	approx. 10 minutes

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 DFG Primer	RE 1
Alkadur AR	RE 2

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.