

## TI 139

Technical Information Surface Protection Linings  
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# ALKADUR A

Paint systems with extensive chemical resistance 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 smooth.

## 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
- smooth, easy-to-clean 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 TI 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 residual moisture of cementitious substrates must not exceed 4 %.

### Steel

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

## 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 DFG
- Alkadur A, at least 2 coats

## 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-A-Solution RAL 7030*	5035103099	Drum	8.3 kg **	12 Months
Alkadur-A-Solution RAL 7032*	5035104099	Drum	8.3 kg **	12 Months
Alkadur-DV-Hardener	5035142011	Canister	3 kg	24 Months
PE-Fibre 940T	5119125007	Drum	1 kg	24 Months
Diluent EN	5060005005	Canister	4 kg	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 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
Total consumption in kg/m <sup>2</sup> (approx.)	0.250	
Work steps	1	

### Alkadur A (2 coats)

	Part by weight	Part by volume
Alkadur-A-solution	8.3	6.85
Alkadur-DV-Hardener	3.0	2.90
On walls: If necessary add max. 0.5 wt.-% PE-Fibre 940T as a standardizing agent. To optimize the surface max. 2 % Diluent EN is to be added (referred to the amount of solutions).		
Consumption for 2 coats	0.400 kg/m <sup>2</sup>	
Work steps	2	
Layer thickness	approx. 0.3 mm	

## Waiting and curing times

The minimum waiting time until further processing and the maximum waiting time between operations are as follows (approx.):

Temperature	Walkable after
15 °C	12 h
20 °C	8 h
35 °C	3 h

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

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

## Pot Life

Pot life depends on temperature:

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.

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 DFG Primer	RE 1
Alkadur A	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.