

TI 235

Technical Information Surface Protection Linings
Issue 18.09.2019

ALKADUR DFG TROPICAL

Self-levelling coating system for concrete substrates.

Base

Epoxy resin

Description

Self-levelling, jointless floor coating system for concrete / screed substrates with high wear resistance and dust-repellent properties. The system shows a good chemical resistance.

Properties

- Self-levelling
- jointless
- Wear resistant
- thermal resistance up to 60 °C

Physical Data

Property (unit), Test method	Value
Density [g/cm ³], DIN EN ISO 1183-1, ASTM D 792	1.9
Abrasion resistance [cm ³ /50 cm ²], DIN 52108, ASTM C 241	4.75
Flexural strength [MPa], DIN EN ISO 178, ASTM C 580	32
Tensile Strength [MPa], DIN EN ISO 527, ASTM C 307	22
Compressive strength [MPa], DIN EN ISO 604, ASTM C 579	85
Modulus of elasticity [MPa], DIN EN ISO 178, ASTM C 580	4300
Lowest working temperature [°C]	10
Maximum working temperature [C]	40

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. 15 – 35 °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

- Alkadur DFG Tropical Primer
- Alkadur DFG Tropical grade 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-DFG-Solution 1	5035120011	Jug	3 kg **	24 Months
Alkadur-DFG-Powder Tropical	5011004101	Bag	22.5 kg	24 Months
Alkadur-DFG-Solution 2 Tropical RAL 7030*	5035438004	Drum	6 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 Tropical Primer

	Part by weight
Alkadur-DFG-Solution 1	1.0
Alkadur-DFG-Solution 2 Tropical	2.0
Diluent EN	0.2
Consumption	0.250 kg/m ²
Work steps	1

Alkadur DFG Tropical grade coating

	Part by weight
Alkadur-DFG-Solution 1	1.0
Alkadur-DFG-Solution 2 Tropical	2.0
Alkadur-DFG-Powder Tropical	7.5
Consumption	1.900 kg/m ² / mm thickness
Work steps	1
Layer thickness	approx. 2 - 3 mm

Waiting Times

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

10 °C	minimum 20 h
15 °C	minimum 15 h
20 °C	minimum 10 h
30 °C	minimum 4 h

The maximum waiting time between the primer and Alkadur DFG Tropical is 24 hours.

Pot Life

Pot life depends on temperature:

10 °C	approx. 90 minutes
15 °C	approx. 80 minutes
20 °C	approx. 40 minutes
30 °C	approx. 25 minutes

Curing times

Up to the walkability depending on the temperature approx. 8 - 14 hours.

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
Primer Alkadur DFG Tropical	RE 2
Alkadur DFG Tropical grade coating	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.