

TI 231A

Technical Information Surface Protection Linings
Issue 18.09.2019

ALKADUR ES C

Jointless broadcast coating system with coloured sand for concrete floor areas.

Base

Epoxy resin

Material Group

Floor- / wall coatings – Broadcast coatings

Description

Jointless broadcast coating for concrete substrates with good chemical resistance. A decorative colouring is achieved by broadcasting coloured sand. The System is suitable for applications in food sectors.

The surface is non-slip.

Use

Coating of concrete and screed in areas where a physiologically harmless and slip resistant coating with decorative appearance is required, e. g. in kitchens or production areas of food and beverage industry.

Properties

- jointless
- decorative colouring by sprinkling with coloured sand
- slip resistant surface
- Slip-resistance properties are adjustable
- suitable for fork lift traffic
- Total thickness approx. 3.0 mm
- the System is suitable for applications in food sectors
- resistant to yellowing
- thermal resistance up to 60 °C (continuous load); up to 80 °C (short-period load)

Physical Data

Property (unit), Test method	Value
Density [g/cm ³], DIN EN ISO 1183-1, ASTM D 792	1.8
Abrasion resistance [cm ³ /50 cm ²], DIN 52108, ASTM C 241	4.75
Lowest working temperature [°C]	10
Maximum working temperature [C]	30
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.

Please refer to the column ALKADUR DFG.

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 %.

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 ALKADUR DFG Primer with Colour-Filler-sprinkling
- Alkadur ES C Base Coat
- 1st Sealing
- If necessary: 2nd Sealing

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-DV-Hardener	5035142011	Canister	3 kg	24 Months
Diluent EN	5060005005	Canister	4 kg	24 Months
Cab-O-Sil TS720	5011016006	Bag	10 kg	24 Months
Cab-O-Sil TS720	5011016003	Bag	5 kg	24 Months
Color Filler xxxF See the colour chart		Bag	25 kg	24 Months
Color Filler xxxG See the colour chart		Bag	25 kg	24 Months

** 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 ² (approx.)	0.250	
Work steps	1	
Spreading with color filler; consumption: 1,500 kg/m ²		

Alkadur ES C Base Coat

	Part by weight	Part by volume
Alkadur DFG/V-Solution 2	2.0	1.74
Alkadur DV-Hardener	1.0	0.98
Consumption	With Color-Filler F 0.800 kg/m² With Color-Filler G 0.960 kg/m²	
Work steps	1	
Spreading with Color-Filler; Consumption: 3,000 kg/m²		

Sealing

1st Sealing	Part by weight	Part by volume
Alkadur-DFG-Solution 2	2.00	1.74
Alkadur-DV-Hardener	1.00	0.98
Cab-O-Sil TS 720	0.03	0.60
Consumption	With Color-Filler F 0.400 kg/m ² With Color-Filler G 0.500 kg/m ²	
Work steps	1	
If required: 2nd Sealing	Part by weight	Part by volume
Alkadur-DFG-Solution 2	2.00	1.74
Alkadur-DV-Hardener	1.00	0.98
Diluent EN	0.06	0.08
Cab-O-Sil TS 720	0.03	0.60
Consumption	With Color-Filler F 0.100 kg/m ² With Color-Filler G 0.300 kg/m ²	
Work steps	1	

Waiting Times

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

15 °C	minimum 16 h
20 °C	minimum 8 h
30 °C	minimum 3 h

Pot Life

Pot life depends on temperature:

	approx. 10 - 70 minutes
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Curing times

To support foot traffic depending on temperature approx. 8 – 16 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 ES C Base Coat	RE 1
1st Sealing	RE 1
Option 2nd Sealing	RE 1

Cleaning of Equipment

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.