

TI 205

Technical Information Surface Protection Linings  
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## OXYDUR UP 82 E

Jointless, flexible coating system with broad chemical resistance, suitable for fork lift traffic

### Base

Polyurethane

### Material Group

Floor- / wall coatings - Leveling compounds

### Description

Jointless, elastic coating system for the protection of concrete and steel substrates. The cured system has a plain-coloured, smooth surface and is suitable for fork lift traffic.

### Use

Coating of concrete and screed surfaces in areas with high mechanical load.

### Properties

- Self-levelling (floor)
- smooth surface
- if required slip resistant version possible
- plain-coloured
- jointless
- suitable for fork lift traffic
- thermal resistance up to 60 °C

Exposed to UV-Light the surface may become dull or change colour.

## Physical Data

Property (unit), Test method	Value
Density (g/cm <sup>3</sup> ), DIN EN ISO 1183-1, ASTM D 792 (floor)	1.80
Density (g/cm <sup>3</sup> ), DIN EN ISO 1183-1, ASTM D 792 (wall)	1.06
Flexural strength (MPa), DIN EN ISO 178, ASTM C 580	8
Compressive strength (MPa), DIN EN ISO 604, ASTM C 579	21
Modulus of elasticity (MPa), DIN EN ISO 178, ASTM C 580	140
Electrical resistance (Ohm) acc. to DIN EN 14879-3 for a relative humidity of > 70 %, ASTM F 150/98	10 <sup>14</sup>
Elongation at tear (%), DIN EN ISO 527, ASTM C 307	10
Shore A hardness, DIN 53505, ASTM D 2240	≈ 95
Tensile Strength (MPa), DIN EN ISO 527, ASTM C 307	4.5
Lowest working temperature (°C)	5
Maximum working temperature (°C)	35
Elastic deformation (%)	95
Plastic deformation (%)	5

## Chemical Resistance

For detailed information about the chemical resistance please refer to Technical Information 200 and 200A.

## 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. 10 – 35 °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

- Priming with ALKADUR P82 (TI 136)
- If necessary pore filling scratch coat floor
- if necessary filling of cavities skirting area / wall
- on floor surfaces: Oxydur UP 82 E
- Wall surfaces: Oxydur UP 82
- if necessary adhesive layer for subsequent tiles / bricks OXYDUR K 425 (TI 102) + sprinkling with SKC-Filler 16
- if required, slip-resistant top layer or sealing with OXYDUR OL (TI 104) or OXYDUR PUW (TI 110)

## 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
Oxydur-UP82-Solution 1	RAL 1001*	5034124004	Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	RAL 6002*	5034125004	Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	RAL 7030*	5034127004	Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	RAL 7031*	5034128004	Bucket	6 kg**	24 Months

Oxydur-UP82-Solution 1	RAL 7032*	5034129004	Bucket	6 kg**	24 Months
Oxydur-E-Powder		5011101014	Bag	22 kg	24 Months
Oxydur-BW-Powder		5011097001	Bag	25 kg	24 Months
SKC-Filler 14		5011201001	Bag	25 kg	24 Months
Cab-O-Sil TS720		5011016006	Bag	10 kg	24 Months
Cab-O-Sil TS720		5011016003	Bag	5 kg	24 Months
Oxydur-UP82-Solution 2		5034134058	Jug	2.4 kg **	6 Months
Oxydur-UP82-E-Solution 1	RAL 7031*	5034116004	Bucket	6 kg **	24 Months
Oxydur-UP82-E-Solution 1	RAL 7032*	5034117004	Bucket	6 kg**	24 Months
Oxydur-UP82-E-Solution 1	RAL 1001*	5034106004	Bucket	6 kg **	24 Months
Oxydur-UP82-E-Solution 1	RAL 6002*	5034112004	Bucket	6 kg**	24 Months
Oxydur-UP82-E-Solution 1	RAL 7030*	5034115004	Bucket	6 kg**	24 Months

\* additional colours on request

\*\* predosed packaging

## Mixing Ratio / Consumption

### Priming with ALKADUR P 82

	Part by weight	Part by volume
See TI 136		

### Pore filling scratch coat floor

	Part by weight	Part by volume
Oxydur-UP82-E-Solution 1	2.5	2.46
Oxydur-UP82-Solution 2	1.0	0.85
SKC-Filler 14	3.5	2.35
Consumption per 1 mm thickness	1.600 kg / m <sup>2</sup>	
Work steps	1	
Layer thickness	If required	

### filling of cavities socket / wall

	Part by weight	Part by volume
Oxydur-UP82-Solution 1	2.5	2.48
Oxydur-UP82-Solution 2	1.0	0.85
Oxydur-BW-Powder	8.8	5.87
Cab-O-Sil TS 720	0.05	1.00
Consumption per 1 mm thickness	1.900 kg / m <sup>2</sup>	
Work steps:	1	
Layer thickness:	If required	

### Floor surfaces Oxydur UP 82 E

	Part by weight	Part by volume
Oxydur-UP82-E-Solution 1	2.5	2.48
Oxydur-UP82-Solution 2	1.0	0.85
Oxydur-E-Powder	9.1	5.62
Consumption	9.000 kg / m <sup>2</sup>	
Layer thickness:	5.0 mm	
Work steps	1	

## Wall surfaces: Oxydur UP 82

	Part by weight	Part by volume
Oxydur-UP82-Solution 1	2.5	2.48
Oxydur-UP82-Solution 2	1.0	0.85
Consumption	3.180 kg / m <sup>2</sup>	
Layer thickness:	3.0 mm	
Work steps	10	

## Undercoat for subsequent tiles / bricks

	Part by weight	Part by volume
See TI 102		
Consumption Oxydur K 425	0.200 kg / m <sup>2</sup>	
Consumption SKC-Filler 16	1.000 kg / m <sup>2</sup>	
Work steps	1	
Layer thickness	approx. 0.5 mm	

## Slip-resistant covering

	Part by weight	Part by volume
Oxydur-UP82-E-Solution 1	2.5	2.48
Oxydur-UP82-Solution 2	1.0	0.85
SKC-Filler 14	1.75	1.18
Consumption	0.600 kg / m <sup>2</sup>	
Work steps	1	
Layer thickness	approx. 0.4 mm	

## OXYDUR OL

	Part by weight	Part by volume
See TI 104		

## OXYDUR PUW

	Part by weight	Part by volume
See TI 110		

## Waiting Times

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

### Alkadur P 82

15 °C	minimum 12 h
20 °C	minimum 8 h
35 °C	minimum 6 h

The maximum waiting time is 48 hours at 20 °C.

### Oxydur UP 82 (Also fillings / trowellings and undercoat for subsequent tiles / bricks):

Temperature	Wall	Floor
5 °C	minimum 5 h	minimum 24 h (support foot traffic)
20 °C	minimum 3 h	minimum 12 h (support foot traffic)
35 °C	minimum 1.5 h	minimum 5 h (support foot traffic)

Subsequent layers can be applied as soon as solidness caused by chemical reaction allows continuation of work.

Curing times for wall areas are not shorter than for floor areas. Supporting of the foot traffic is to be considered.

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

If maximum waiting time is exceeded, consult the laboratory, application technology.

## Pot Life

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

5 °C	90 minutes
20 °C	30 minutes
35 °C	10 minutes

## Curing times

### Up to walkability depending on temperature

5 °C	24 h
20 °C	12 h
35 °C	5 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. Skin protection soap and skin protection ointment should be used. In all other respects comply with the relevant regulations for prevention of accidents.

Refer to the Safety Data Sheets!

## GISCODE

Product	GISCODE
Alkadur P82	RE 1
Oxydur UP 82 E	PU 40
Oxydur K425	SB-STY 20
Oxydur OL	PU 50
Oxydur PUW	W 3/DD

## 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.