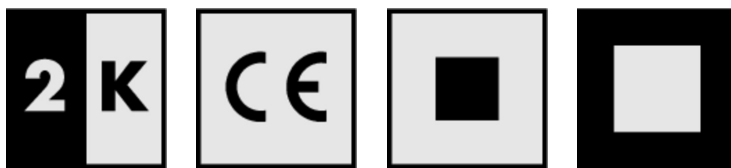


ASODUR®-K4031

2 component epoxy resin universal adhesive, thixotropic



Material number	Contents	Unit of quantity	Packaging	Colour
206409001	6	KG	Set	Grey

Product features

- Two component
- CE per DIN EN 1504-4
- Resistant to a multitude of diluted acids, alkaline solutions, concrete-damaging water
- Water tight Up to 5 bar, from 10 mm layer thickness
- Solvent free
- non-shrinking
- Fulfils the requirements of ASTM C-881 Type I and IV, Grade 3, Class B and C

Advantages

- High compressive and flexural strengths
- High tensile adhesion strength
- High deformability at low temperatures
- Can be used without primer

Areas of application / surface protection

- For the fastening of anchors
- For the adhesion of concrete to concrete
- As adhesive for ASO®-Tape
- For the bonding of metal, ceramics and plastics
- For the bonding of finished streak plates

Existing test certificates

- Reaction to fire
- DIN EN 1504-4

ASODUR[®]-K4031

Technical Data

Material properties

Product components	2 component system
Base material	Epoxy resin
Consistency	Filler consistency
Dichte, verarbeitungsfertiges Produkt (ISO 1183-1)	approx. 1.7 kg/dm ³
Flexural strength (DIN EN 196-1)	approx. 30 N/mm ²
Compressive strength (DIN EN 196-1)	approx. 60 N/mm ²
Adhesion	≥ 2 N/mm ²
Viscosity, ready to use product	Filler consistency
Watertightness (DIN EN 12390-8)	Up to 5 bar, from 10 mm layer thickness
Classification of the reaction to fire in accordance with DIN EN 13501-1	Efl

Mixing

Mix ratio, component A	2 weight proportion
Mix ratio, component B	1 weight proportion
Mixing time	approx. 3 minutes

Application

Substrate temperature	from 10 °C to 35 °C
Max. relative humidity	80 %
Pot life	approx. 60 minutes
Consumption pro m ² and mm layer thickness	approx. 1.7 kg/m ²
Minimum reaction temperature	min. 10 °C
Mixing method, machines, tools	Drill with stirrer Standard Collormix stirrer Xo 1R
Overcoat (min.)	after 16 hours
Application temperature	from 10 °C to 35 °C
Overcoat (max.)	to 24 hours
Hardening time / full resilience	approx. 7 days
Adhesive open time (min.)	≥ 90 minutes

Application technology

Aids/tools

- Flat trowel
- Stirrer (approx. 300 rpm)
- Serrated or layer-thickness trowel
- Tooth comb
- Paste brush
- Collomix X 01 R

Suitable substrate

- Concrete
- Cement screed (CT)
- Steel (min. SA 2 1/2)

ASODUR®-K4031

Substrate preparation

Requirement for substrate

1. Dry to matt damp (not pore saturated)
2. Firm
3. Load-bearing
4. Grippy
5. Free of adhesion inhibiting substances
6. Protected from moisture penetration from the rear

Measures for substrate preparation

1. Suitability for use on non-concreted substrates and must be checked in each individual case by carrying out a trial adhesion.
2. Substrate preparations must be carried out in compliance with DIN EN 14879-1:2005, 4.2 et.seq.

Substrate quality class

	Quality / surface cleanliness	Tensile adhesion strength	Age	Moisture content
Concrete	at least C20/25	≥ 1.5 N/mm ²	at least 28 days	< 4% (CM method)
Screed	at least CT-C25-F4 in accordance with DIN EN 13813	≥ 1.5 N/mm ²	at least 28 days	< 4% (CM method)
Plaster	at least P III a / P III b	≥ 0.8 N/mm ²	at least 28 days	< 4% (CM method)
Steel	at least SA 2 1/2 in accordance with DIN EN ISO 12944	≥ 1.5 N/mm ²		

Usage

Mixing

1. The (ideal) material temperature during the mixing procedure is +15 °C.
2. Mix the resin homogeneously in the original container.
3. Add the hardener to the resin.
4. The hardener must run completely out of the container.
5. Mix thoroughly with the mixer until a homogeneous consistency.
6. The hardener must be distributed evenly.
7. The mixing time is ca. 3 minutes.
8. Decant the mass into a clean bucket.
9. Stir meticulously again.

Application

1. Apply mixed and re-potted ASODUR®-K4031 into the prepared substrate with smoothing/notched/coating thickness trowel.
2. Work ASODUR®-K4031 into the open pores in the scratch coat procedure
3. Apply ASODUR®-K4031 to the scratch coat again and distribute evenly according to the application.

Anchor grouting

1. Always select a drill hole diameter at least 6 mm larger than the anchor diameter.
2. Clean the drill hole with a bottle brush and remove dust thoroughly.
3. After filling the borehole with ASODUR®-K4031, insert and fix the anchor steel with rotary movements.
4. Remove excess grouting material immediately.

Cleaning tools

Immediately after use, clean tools with ASO-R001.

Storage conditions

Storage

Store in a frost-free, cool and dry place. At min. 10 - 25 °C for 24 months in the original canister. Promptly use opened canister.

Disposal

Hardened product leftovers can be disposed of in accordance with disposal code AWV 15 01 06.

ASODUR®-K4031

Notes

- The indicated consumption quantities are calculated values without additions for textured surface roughness and absorbency, level compensation, and residual material in the canister. We always recommend a calculated safety addition of 10% on top of the calculated consumption quantities.
- Higher temperatures shorten the pot life. Lower temperatures increase the application and hardening times. The rate at which material is consumed also increases at lower temperatures.
- The bonding between the individual layers can be strongly disrupted between the individual application steps due to the effects of dampness and contamination. Coating work requires a substrate temperature of at least 3 °C above the dew point temperature.
- If longer waiting times arise between the individual application steps or surfaces that have already been treated with liquid resin are coated again after an extended waiting time, the old surface must be well cleaned and thoroughly ground. Then apply a complete pore-free new coating.
- Synthetic resin products and surface protection systems must be protected from moisture (e.g. rain or condensation water) for approx. 4-6 hours after application. Moisture causes a white colour and/or stickiness on the surface and can cause problems during hardening. Discoloured and/or sticky surfaces must be removed and reworked, e.g. through grinding or shot blasting.
- Observe the technical data sheets of the products mentioned before starting work.
- Applications that have not been clearly mentioned in this technical data sheet may only be carried out after the technical service department of SCHOMBURG GmbH has been consulted, and after the said department has approved of such a course of action in writing.
- For detailed information on application, read and observe supplementary technical information no. 19 "Applying ASODUR products".


The recognised standards of construction engineering, the relevant guidelines and current regulations must be observed.

Observe applicable safety data sheet!

GISCODE: RE 30

Annotations

Conformity / Declaration / Verification

	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2-8 · 32760 Detmold, Germany 17 2 06409	
DIN EN 1504-4:2004 ASODUR-K4031 Adhesive for construction purposes for adhesion of mortar and concrete	
Compressive strength	≥ 30 MPa
Shear strength	≥ 6 MPa
Open time	declared value +/-20%
Application duration (Pot life)	declared value
Modulus of elasticity at pressure	≥ 2000 MPa
Glass transition temperature	≥ +40 °C
Thermal expansion coefficient	$\alpha T \leq 100 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
Total shrinkage of adhesive	target ≤ 0.1 %
Adhesion	cohesion breakage in concrete
Use and hardening under special environmental conditions	Breakage in concrete
Durability	passed
Reaction to fire	E
Hazardous substances	NPD

NPD = "No Performance Determined"

ASODUR®-K4031

Chemical durability

Test fluid	Concentration (%)	Classification		
		low resistance (≤ 8 hours)	moderate resistance (≤ 72 hours)	high resistance (≤ 14 days)
Inorganic acids				
Nitric acid	15			■
Sulphuric acid	15			■
Hydrochloric acid	30			■
Organic acids				
Formic acid	2			■
Citric acid	15			■
Lactic acid	20			■
Alkalies				
Sodium hydroxide	20			■
Ammonia	25			■
Solvent				
Kerosene	neat			■
Petrol	neat			■
Diesel	neat			■
Ethanol	neat		■	
Oils				
Engine oil	neat			■
Brake fluid	neat			■
Heating oil	neat			■
Aqueous solution				
Seawater	20			■
De-icing salt-solution	35			■

All information has been determined under lab conditions at +20 °C, deviations due to higher temperatures, local conditions and ambient conditions are possible. It is not possible to fully exclude minor visible surface changes or slight swelling that does not affect the functionality of the waterproofing. In case of doubt, we recommend an object-specific suitability test.

The rights of the buyer with regard to the quality of our materials are based on our terms and conditions of sale and delivery. Our technical advice team will be happy to advise you in the case of requirements that exceed the scope of the application described here. In order to be binding, a legally binding written confirmation is required. The product description does not release the user from a duty of care. Lay a test area in the event of uncertainty. This version becomes invalid in the event of a new version being issued.