

# ASODUR®-EV200

Flowable high-performance mortar based on epoxy resin



Material number	Package type	Colour	Units / pallet	Pc/package
206436001	30 kg, set (3 component)	Grey	42	1

## Areas of application / surface protection

- For the fastening of anchors
- For waterproofing construction elements
- For grouting foundations
- For coating matt damp and dry substrates
- Can be overcoated with ASODUR® coating systems
- For layer thicknesses of 10 - 200 mm
- As machine grouting
- For grouting gutters
- For grouting pillars and support structures
- For grouting support and railing posts
- As load distribution layer on challenging substrates
- For filling gutters, cavities and gaps (e.g. swimming pool construction)
- for interior and exterior use
- As electrically insulating grouting for railway lines and track construction
- For grouting and embedding crane rails and turbines
- For force-fit bonding concrete and metal
- For the repair of substrates subject to heavy use and exposure
- For grouting guard rails, railing posts and supports in hall and rack construction
- For horizontal applications
- As a load distribution layer of min. 10 mm layer thickness on old wooden floorboards (it is imperative that the respective structural conditions be taken into account)

## **ASODUR<sup>®</sup>-EV200**

### **Product features**

- Three-component epoxy resin
- Solvent free
- Low shrinkage
- Water tight Up to 5 bar, from 10 mm layer thickness
- Fire class B (DIN EN 13501) for layer thicknesses up to 75 mm
- CE after DIN EN 13813
- CE after DIN EN 1504-6

### **Advantages**

- High compressive and flexural strength (impact and vibration resistant)
- High mechanical strength and withstands high chemical loads
- Good bonding to concrete, steel and wood (good adhesion properties); electrically insulating
- Self-compacting (good flow properties)
- Easy to mix and lay (long working time)
- Rapid strength development
- Can be used without primer

### **Existing test certificates**

Testing in accordance with DIN EN 1504-6-2006

## ASODUR<sup>®</sup>-EV200

### Technical Data

#### Material properties

Product components	3 component system
Base material	Epoxy resin
Consistency	Flowable mortar
Density, ready to use product (ISO 1183-1)	approx. 1.9 kg/dm <sup>3</sup>
Compressive strength (24 hrs.)	approx. 65 N/mm <sup>2</sup>
Compressive strength (7 days)	approx. 109 N/mm <sup>2</sup>
Flexural strength (DIN EN 196-1)	approx. 40 N/mm <sup>2</sup>
Tensile adhesion strength (concrete, dry until matt damp)	≥ 2 N/mm <sup>2</sup>
Tensile adhesion strength (steel)	≥ 2 N/mm <sup>2</sup>
Viscosity, ready to use product	Flowable
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	Bfl - s1 bis 75 mm Schichtdicke

#### Mixing

Mix ratio, component A	5.04 weight proportion
Mix ratio, component B	1.66 weight proportion
Mix ratio, component C	23.3 weight proportion
Mixing time	approx. 3 minutes

#### Application

Substrate temperature	approx. 10 - 35 °C
Max. relative humidity	80 %
Pot life	approx. 120 minutes
Consumption pro m <sup>2</sup> and mm layer thickness	approx. 1.9 kg/m <sup>2</sup>
Minimum reaction temperature	min. 10 °C
Mixing method, machines, tools	Drill with stirrer Standard Collormix stirrer Mk 140 HF Collomix stirrer XM 2-G50
Overcoat after (min.)	after 12 hours
Foot traffic after	approx. 12 hours
Application temperature	approx. 10 - 35 °C
Overcoat after (max.)	to 72 hours
Hardening time / full resilience	approx. 7 days

### Processing equipment

#### Aids/tools

- Paste brush
- Collormix stirrer Mk 140 HF
- Stirrer
- Collomix stirrer XM 2 - G50
- Collomix stirrer CX60

### Preparing the substrate

#### Requirement for substrate

1. dry to matt damp
2. Firm
3. Load-bearing
4. Grippy
5. Free of adhesion inhibiting substances

## ASODUR<sup>®</sup>-EV200

### Measures for substrate preparation

1. Substrate preparations must be carried out in compliance with DIN EN 14879-1:2005, 4.2 et.seq.
2. Cleaned metal surfaces must be coated with ASODUR<sup>®</sup>-EV200 within 4 hours. In case of a longer waiting time, the corrosion protection ASODUR<sup>®</sup>-SG3-thix must be applied in advance in accordance with the technical data sheet.

### Substrate quality class

### Application

#### Mixing

1. The (ideal) material temperature during the mixing procedure is +15 °C.
2. Add the hardener to the resin.
3. The hardener must run completely out of the container.
4. Mix thoroughly with the mixer until a homogeneous consistency is achieved.
5. The hardener must be distributed evenly.
6. The mixing time is ca. 3 minutes.
7. Decant the mass into a clean bucket.
8. Add component C (filler) in portions while continuously stirring the mass.
9. Stir until the mortar reaches a homogeneous, flowable consistency. It is important here that the contents are also stirred up from the sides and from the base. Mixing time: ca. 3 minutes.
10. The aggregates must have a material temperature of approx. +15 °C.
11. Allow the mixed grouting compound to rest for a short time before application to allow trapped air bubbles to escape more easily.

#### 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<sup>®</sup>-EV200, insert and fix the anchor steel with rotary movements.
4. Remove excess grouting material immediately.

#### Machine grouting

1. Provide sufficient material for complete grouting so that the grouting process does not have to be interrupted. Otherwise, there is a risk of pockets forming. Mixing and grouting times per container should be carefully predetermined to ensure continuous grouting.
2. Grouting or under grouting is preferably done from one side or corner only, so that the displaced air can escape more easily and hollow layers are avoided.
3. For large-area grouting measures, start from the centre if possible. Filling funnels can be used to support this.
4. First fill the anchor holes to below the top edge of the anchor hole, then grout the machine plate. The minimum layer thickness is 10 mm.
5. Layer thicknesses of more than 200 mm must be laid as a multiple skin application. The following layer can be applied without priming after the previous layer has cured and cooled down (approx. 12 hours).

#### Grouting of support and railing posts

Pillar and support openings can be grouted up to a height of 800 mm and a diameter of up to 300 mm in one go.

#### Surface application

1. Spread the mixed grouting mortar in strips on the substrate and level to the desired layer thickness using a height-adjustable squeegee.
2. After waiting for approx. 150 to max. 180 minutes, smooth off in strips with a surface spatula, eliminating any surface air bubbles.

#### Surface application on wood/wooden floor board substrates

1. Damaged wood/board substrates must be replaced, loose floor boards must be professionally fixed (e.g. screws, etc.).
2. Cover open butt joints of the floor boards with self-adhesive tape.
3. Spread the mixed grouting mortar in strips on the timber substrate and level to the desired layer thickness using a height-adjustable squeegee.
4. After waiting for approx. 150 to max. 180 minutes, smooth off in strips with a surface spatula, eliminating any surface air bubbles.

#### Slip-resistant surface

1. To achieve a slip-resistant surface, ASODUR<sup>®</sup>-EV200 can be sprinkled with quartz sand (Ø 0.5-1.0 mm) covering the whole area after approx. 120 min.
2. Remove the surplus quartz sand after hardening.
3. Apply a top coat of sealer (e.g. ASODUR<sup>®</sup>-B351) using the roller method.

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### Overcoating

ASODUR®-EV200 can be overcoated after curing within 12 to max. 72 hours (without primer) with ASODUR®-coatings (ASODUR®-B351, ASODUR®-V360W).

### Cleaning tools

Clean tools immediately after use with suitable solvent.

### 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 container.

### Notes

- All values given in the TM apply at +23 °C and 50% relative humidity.
- The indicated consumption quantities are calculated values without additions for textured surface roughness and absorbency, level compensation and residual material in the container. 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 period of time, the old surface must be well cleaned and thoroughly roughened. 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.
- Exposure to abrasive stresses during use may cause scratches in the surfaces which will be visible particularly in the case of dark colour shades. This will not have a negative impact on functional capability. We recommend cleaning and treating the surfaces on a regular basis with suitable cleaning and care agents in order to maintain the surface quality and appearance during use.
- 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".

### Relevant regulations

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



**Observe applicable safety data sheet!**

GISCODE: RE 90

# ASODUR<sup>®</sup>-EV200

## Explanations

Conformity / Declaration / Verification

	
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DIN EN 1504-6:2006-11 <b>ASODUR-EV200</b> Anchoring product	EN 13813 <b>ASODUR-EV200</b> Synthetic resin screed mortar for indoor application
Pull-out resistance ≤ 0.6 mm Chloride ion content ≤ 0.05% Glass transition temperature ≥ 45 °C Creepage under tensile load ≤ 0.6 mm Reaction to fire E Hazardous substances NPD	Reaction to fire Class E Release of corrosive substances SR Compressive strength C80 Flexural strength F30 Wear resistance ARO.5 Adhesive strength B2.0 Impact resistance IR16

NPD = "No Performance Determined"

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## Chemical durability

Test fluid	Concentration (%)	Classification		
		low resistance (≤ 8 hours)	moderate resistance (≤ 72 hours)	high resistance (≤ 14 days)
<b>Inorganic acids</b>				
Nitric acid	15			■
Sulphuric acid	20			■
Hydrochloric acid	10			■
<b>Organic acids</b>				
Formic acid	5		■	
Citric acid	20			■
Lactic acid	20		■	
<b>Alkalis</b>				
Sodium hydroxide	conc.			■
Ammonia	conc.			■
<b>Solvent</b>				
Kerosene	neat			■
Petrol	neat			■
Diesel	neat			■
Ethanol	neat			■
<b>Oils</b>				
Engine oil	neat			■
Brake fluid	neat			■
Heating oil	neat			■
<b>Aqueous solution</b>				
De-icing salt	conc.			■

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