ASODUR®-SG3-thix

Epoxy resin barrier primer for damp substrates, thixotropic



Material number	Package type	Colour	Units / pallet	Pc/package
205047002	6 kg, combination container	creamy white	70,000	1,000
205047003	30 kg, set	creamy white	12,000	1,000
	A-component: 23.81 kg, pail		12,000	1,000
	B-component: 6.19 kg, pail		42,000	1,000

Areas of application / surface protection

- as a primer for concrete/bonded screed surfaces that are still matt damp with subsequent covering
- as a protective primer to avoid osmotic bubbles in case of reverse moisture penetration
- for producing capillary-breaking mortar

Product features

- Solvent free
- moisture-compatible and diffusion-blocking

Advantages

- very good adhesion to damp substrates
- suitable for spraying with airless spray equipment
- Watertightness against negative pressing water up to 3 bar
- Can also be used vertically and overhead

Existing test certificates

- Water vapour permeability in accordance with DIN EN ISO 1931
- Investigation report 20-20

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Technical Data

Material properties

Product components	2 component system
Base material	Epoxy resin
Consistency	liquid, paste
Density, ready to use product (ISO 1183-1)	approx. 1.5 g/cm³
Flexural strength (DIN EN 196-1)	approx. 50 N/mm²
Compressive strength (DIN EN 196-1)	approx. 80 N/mm²
Tensile adhesion strength (concrete, dry until matt damp)	≥ 1.5 N/mm²
Water vapour permeability, SD	Approx. 105 m, diffusion barrier
Watertightness against negative pressing water	to 3 bar
Classification of the reaction to fire in accordance with DIN EN 13501-1	Efl

Mixing

Mix ratio, component A	100 weight proportion
Mix ratio, component B	26 weight proportion
Mix ratio, addition of ASO-FF levelling / scratch coat	0.06 percentage by weight
Mix ratio filler levelling compound ASO-FF	0.3 percentage by weight
Mix ratio, addition of quartz sand mortar (Ø 0.06–1.5 mm)	approx. 4.17 weight proportion
Mixing time	approx. 3 minutes

Application

Substrate temperature	approx. 10 - 35 °C
Max. relative humidity	80 %
Pot life	approx. 35 minutes
Minimum reaction temperature	min. 10 °C
Mixing method, machines, tools	Drill with stirrer
Consumption	approx. 0.60 - 1.00 kg/m²
Overcoat after (min.)	after 12 hours
Overcoat after (max.)	to 5 days
Consumption (capillary-breaking mortar per mm layer thickness)	approx. 2 kg/m²
Foot traffic after	approx. 12 hours
Consumption (levelling compound with ASO-FF)	approx. 1.6 kg/m²
Application temperature	approx. 10 - 35 °C
Hardening time / full resilience	approx. 7 days

Processing equipment

Aids/tools

- Stirrer (approx. 300 rpm)
- Rubber lip slider
- Circular cage
- Nylon fur roller (6mm) with textured polyamide cover
- Primer brush

Manual processing

- distributable with rubber lip slider
- Distributable with nylon fur roller

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Preparing the substrate

Requirement for substrate

1. Dry to damp (in accordance with DAfStB "Guideline for protection and maintenance of concrete parts")
2. Firm
3. Load-bearing
4. Grippy
5. Free of adhesion inhibiting substances

Measures for substrate preparation

Substrate preparations must be carried out in compliance with DIN EN 14879-1:2005, 4.2 et.seq.

Substrate quality class

	Concrete	Screed	Plaster
Quality	at least C20/25	at least CT-C25-F6	at least P IIIa/P IIIb
Tensile adhesion strength	≥ 1.5 N/mm²	≥1.5 N/mm²	ca. 0.8 N/mm²

Oil contaminated surfaces

1. Following successful substrate preparation, pre-treat the surfaces concerned with the cleaning material ASO®-R008 (dilution in accordance with the technical data sheet of ASO®-R008).
2. Clean the treated surfaces with warm water (approx. +50 °C to +70 °C).
3. Remove excess water with suitable suction equipment.
4. Apply ASODUR®-SG3-thix by brush and roller.
5. Please note: No sealed water film may be present on the surface of the concrete! The substrate may not be dried off; drying off results in the danger that rising oil could negate bonding of the special primer to the substrate.

Application

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. The mixing time is ca. 3 minutes.
6. Mix thoroughly with the mixer until a homogeneous consistency is achieved.
7. The hardener must be distributed evenly.
8. Decant the mass into a clean bucket.
9. Stir carefully again.
10. When adding quartz sands, make sure that they are kiln-dried and, like other aggregates, also have a temperature of approx. +15 °C.

Producing and applying capillary-breaking mortars

1. Mix the mixed ASODUR-SG3-thix with quartz sand (Ø 0.06–1.5 mm) at a mix ratio of 1: 4.17 (corresponding to 6 kg ASODUR-SG3-thix + 25 kg quartz sand) homogeneously.
2. Prime the substrate with ASODUR-SG3-thix.
3. Apply the mortar while still wet using trowel techniques and ensure evenly compaction.
4. The minimum layer thickness for capillary-breaking mortar made of ASODUR-SG3-thix and quartz sand (0.06 - 1.5 mm) must be 2 cm.
5. Mortar consumption: approx. 2 kg/m² per mm layer thickness

Protective primer (increasing moisture) under cement-based screeds applied while still wet

1. On the substrate, spread ASODUR®-SG3-thix evenly with a rubber squeegee.
2. Carefully brush ASODUR®-SG3-thix into the surface area with the priming brush and finish with a short-pile fur roller in a criss-cross pattern.
3. After a waiting time of ≥ nach 12 hours bis 5 days apply a second coat of ASODUR®-SG3-thix.
4. Apply the cement-based screed while still wet to damp earth using the application technique described above.

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Protective primer (increasing moisture) under the following mortars

1. On the substrate, spread ASODUR®-SG3-thix evenly with a rubber squeegee.
2. Carefully brush ASODUR®-SG3-thix into the surface area with the priming brush and finish with a short-pile fur roller in a criss-cross pattern.
3. After a waiting time of ≥ nach 12 hours bis 5 days apply a second coat of ASODUR®-SG3-thix.
4. Sprinkle the second layer of primer with quartz sand (Ø 0.1 - 0.6 mm or Ø 0.5 - 1.0 mm).
5. After the second layer has hardened, further processing with mortars can take place (e.g. tiling with a thin-bed mortar such as MONOFLEX-XL).

Application

1. On horizontal surfaces, spread ASODUR®-SG3-thix evenly with a rubber squeegee.
2. Apply evenly on sloping surfaces with a short-pile fur roller or a flat brush.
3. Meticulously brush into the surface area with a primer brush.
4. Roll on evenly with a short-pile fur roller.
5. On vertical and "overhead" surfaces, ASODUR®-SG3-thix is applied using an airless system.
6. After a waiting time of approx. 12 hours to max. 5 days, work can continue with an ASODUR® coating system or the floor covering structure.
7. Protect the surfaces against fouling! Walk on the surfaces with clean shoe covers only until the complete system construction of the DENSARE-PREMIUM system or the ASODUR® coating has completed.

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 18 months in the original canister. Promptly use opened container.

Notes

- 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.
- Ensure there is good ventilation during the drying and hardening phases.
- High temperatures, direct sunlight, and draught air can cause a skin to form and impair the necessary grain formation and penetration into the substrate.
- After they have been applied, surface protection systems must be protected against dampness (e.g. rainwater, condensation water) for approx. 4–6 hours. 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.
- Severely absorbent substrates that tend towards pores, bubbles, or pinholes must be treated beforehand. In addition to this, 6% ASO®-FF (fibre filler material) is mixed into the mixed ASODUR®-SG3-thix. Using the levelling compound that is created, a scratch coat is completed first. Next, a 4 mm toothed trowel is used for fresh-in-fresh application, and then the layer is smoothed off. After the material is cured, ASODUR® -SG3-thix is used to prime as described in the method of application in point 1. Material requirement: approx. 1.7 kg/m².
- If ASODUR®-SG3-thix is used as a vapour barrier under conventional floor coverings, e.g. PVC, linoleum, carpet and parquet, then no adhesive containing solvents may be used. This leads to persistent buckling in the applied floor covering.
- Surfaces that are not to be treated must be covered.
- 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".

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Relevant regulations

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

Observe applicable safety data sheet!

Explanations

Conformity / Declaration / Verification

CE

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EN 1504-2
ASODUR-SG3-thix
Surface protection material – Impregnation

Capillary water absorption and water permeability	$w < 0.1$ kg/m² × $h^{0.5}$
Penetration depth	Class I < 10 mm
Pull-off test for assessment of adhesion	≥ 1.5 (1.0) N/mm²
Reaction to fire	Class E
Hazardous substances	Compliance with 5.3 of EN 1504-2

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