



Technical Data Sheet

ASODUR®-SG3

Moisture blocking two-component epoxy primer

Art.-No. 2 05049

Properties:

- solvent free
- two-component
- low viscosity
- VOC free
- moisture blocking
- water vapour impermeable
- water and frost resistant
- resistant to dilute alkalis, acids, water-based salt solutions and lubricants.


Areas of application:

ASODUR-SG3 is used:

- as a moisture blocking primer on cementitious surfaces, ceramic finishes, multi-layered wood boards and similar, that are to be coated with ASOFLOOR systems
- for the production of levelling and key coats, as a substrate preparation for coatings.

Technical Data:

Basis:	two-component epoxy resin
Colour:	transparent
Viscosity:	approx. 600 ± 80 mPA/s at +25 °C
Mixing ratio:	100:52 parts by weight
Mix density:	approx. 1.09 ± 0.02 g/cm ³
Pot life:	approx. 35 mins at +23 °C
Application temperature:	min. approx. +10 °C, max. +35 °C
Traffic after:	min. approx. 12 hrs at +23 °C
Ready for overcoating:	after approx. 12 hrs, up to a max. 7 days at +23° C/50% RH
Fully cured:	after approx. 7 days at +23 °C
Curing temperature (Material / substrate):	+10 °C to +30 °C
Tensile adhesion strength:	B 1.5 (Concrete failure)
Water vapour permeability:	S _D > 50 m (Class III according to EN 1504-2)

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EN 1504-2 ASODUR-SG3 Surface Protection Product - Impregnation	
Principle 1.2	
Capillary water absorption and water permeability	w < 0.1 kg/m ² × h ^{1/2}
Penetration depth	Class I < 10 mm
Tensile adhesion strength by pull-off test	≥ 1.5 (1.0) N/mm ²
Reaction to fire	Class E
Hazardous substances	In compliance with 5.3 of EN 1504-2

Cleaning:

Thoroughly clean tools immediately after use with AQUAFIN-Cleanser.

Packaging:

3 kg
 Components A and B are delivered at a predetermined mixing ratio. frost-free, 24 months when stored dry and cool, above +10 °C in the original unopened containers.

Storage:

Substrate preparation:

Concrete and cement-based screed substrates must be sound, clean, dry or damp and free from materials that will affect adhesion. Weak or poorly bonded layers e.g. release agents, old adhesive, smoothing compounds and residues of floor finishes or paints must be completely removed.

ASODUR-SG3 can be used on the following substrates:

- on concrete and cement-based screeds subject to moisture penetration from the rear
- concrete and cement-based screeds with increased residual moisture *. Note: residual moisture of cementitious substrates: dry or damp (according to Def. Rili SiB). * * "Guidelines for the protection and restoration of concrete building elements" part 2, paragraph 1.2.5 "Concrete moisture".

"Dry": An approximately 2 cm deep freshly prepared cut-out area may not become visibly lighter as a result of drying out. (In cases of doubt the concrete is considered dry if it shows moisture balance for the climatic conditions 23/50: i.e. dependent on concrete type other absolute values are considered as "dry").

"Damp": The surface has a matt damp appearance but should not exhibit a shiny film of water. The pores of the substrate may not be saturated, i.e. water droplets applied must be absorbed and after a short time period the surface must once again appear matt.

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In addition the following criteria are to be fulfilled dependent on the substrate:

Cementitious surfaces:

- Concrete quality: min. C 20/25
- Screed quality: min. EN 13813 CT-C25-F4
- Render quality: min. P III
- Age: min. 28 days
- Tensile adhesion: $\geq 1.5 \text{ N/mm}^2$
(render: min. 0.8 N/mm^2)

Product preparation:

Components A (resin) and B (hardener) are delivered at a predetermined mixing ratio. Tip component B into component A. Ensure that the hardener drains completely from its container. Mix both components together using a suitable rotary stirrer at approx. 300 rpm (e.g. mixing paddle and drill). It is important that stirring agitates the sides and bottom so as to equally disperse the hardener. Stirring is to be continued until the mix is homogenous (free from streaks): mix time 3 minutes. During the mixing process the temperature should be approx. $+15^\circ\text{C}$. Do not use mixed material directly from the packaging! Decant the mixture into a clean mixing bucket and thoroughly stir through once again.

Note:

When applying the product please ensure that the material is evenly "flooded" over the prepared substrate. Uneven areas lead to capillary pores in the hardened priming coat, which benefits the formation of bubbles, especially osmosis bubbles. To ensure a pore free priming coat, apply the primer in two coats "wet in wet". The pore-free finish can be enhanced by the application of a second coat of a watertight smoothing mortar. This smoothing mortar is to be produced from the priming resin with the addition of quartz sand – see production: levelling/key coat.

When mixing aggregate (e.g. quartz sand) it must be ensured that the aggregate is dry and is also at $+15^\circ\text{C}$.

Production of levelling/key coats:

ASODUR-SG3: 1.0 part by weight
Quartz sand: approx. 1.0 part by weight
(particle size 0.1 - 0.4 mm or 0.2 - 0.7 mm)

Suitable filler: approx. 2 - 3 % by weight
The quartz sand is to be added to the previously mixed and decanted resin and hardener components. Ensure that the liquid and solid components are evenly dispersed.

Method of application / consumption:

Primer:

ASODUR-SG3 is flood applied, pore-tight in one application. Consumption: approx. $400 - 670 \text{ g/m}^2$.

Advice:

- The consumption values for ASODUR-SG3 are in accordance with the established water vapour emission values. Method of measurement: Calcium chloride test.
- The cleaned and primed area must be overcoated within 12 hours up to a maximum of 7 days at $+23^\circ\text{C} / 50\% \text{ RH}$.
- Non-sanded primer may only be trafficked with clean "overshoes".

It is possible to broadcast a second layer of quartz sand (grain size: e.g. 0.2 – 0.7 mm).

Consumption: approx. $0.8 - 1.0 \text{ kg/m}^2$

Once cured, thoroughly remove all non-bound quartz sand before applying coatings/scratch coats.

Levelling/key coat:

Firstly prime the substrate with ASODUR-SG3 as previously described. The mixed smoothing mortar is applied in one application using the bonding coat technique. Consumption of prepared smoothing compound: approx. $1.600 \text{ g/m}^2/\text{mm}$

Health & Safety:

Once cured ASODUR-SG3 is considered harmless. The hardener (component B) is corrosive. We refer to the current advice/brochures distributed by Plastics Europe, www.plasticseurope.org, "Epoxy resins and hardeners". Supplementary information:

BGR 190 – Regulations for the use of breathing apparatus

BGR 192 – Regulations for the use of eye and face protection

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BGI 868 – Protective gloves for use with chemicals.
Observe the advice given on the packaging.

Important advice:

- Higher temperatures shorten the pot life. Lower temperatures increase the pot life and setting time. Material consumption is also increased at lower temperatures.
- The bond between coats can be impeded through the influence of moisture or contamination between successive coats.
- When longer waiting times occur between the individual layers or where the surface already prepared with synthetic liquid resin needs to be renewed, the existing surface must be well cleaned and abraded, after which a completely new pore-free sealing is to be undertaken.
- Surface protection systems must be protected from damp (e.g. rain, melt-water) for 4 – 6 hours after application. Dampness produces a white colouration and/or stickiness on the surface and leads to breakdown during curing. Discoloured and/or sticky surfaces must be removed, e.g. by abrasion or blasting, and renewed.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from the Technical Services Department of SCHOMBURG GmbH Systembaustoffe.
- Dipsose of cured product residues under waste code 57123 "epoxy resin".

Please observe a valid EU safety data sheet!

GISCODE: RE 1

