




## Technical Data Sheet

# ASODUR®-GBM

## Primer, sealer and mortar resin

**Art.-No 2 05751**

 <small>1119</small>	
<b>SCHOMBURG GmbH &amp; Co. KG</b> Aquafinstraße 2-8 · D-32760 Detmold 06 2 05751	
EN 1504-2 <b>ASODUR-GBM</b> Surface protection product - Impregnation	
Principle 1.2	
Capillary water absorption and water permeability	w < 0.1 kg/m <sup>2</sup> × h <sup>1/2</sup>
Penetration depth	Class I < 10 mm
Tensile adhesion strength by pull-off test	≥ 1.5 (1.0) N/mm <sup>2</sup>
Reaction to Fire	Class E
Dangerous substances	In compliance with 5.3 of EN 1504-2

- two component
- solvent free
- transparent
- low viscosity
- watertight
- low WDD value (to DIN EN ISO 7783-1 = 1.2 g/m<sup>2</sup> × d
- resistant to alkalis, acids, aqueous salt solutions, grease and fuels

### Areas of application:

- For the sealing of cement-based surfaces e. g. production areas, warehouses, ramps
- For the priming of cement-based areas which will be coated with ASODUR products
- For the production of levelling and scratch coats for surface preparation for coating measures
- For producing epoxy resin screeds
- for use as a fluid resin for sealing cracks in screeds

### Technical Data:

Basis:	2 component epoxy resin
Colour:	transparent
Viscosity*:	approx. 640 ± 80 mPas 80
Density*:	approx. 1.09 g/cm <sup>3</sup>
Mixture ratio:	2:1 parts by weight

Ambient and substrate temperatures:

Pot life*:	25 - 35 minutes
Food traffic after*:	approx. 12 hours
Overcoat after*:	approx. 12 hours up to max. 24 hours
Fully cured after*:	approx. 7 days
Compressive strength:	approx. 65 N/mm <sup>2</sup>
Flexural strength:	approx. 30 N/mm <sup>2</sup>
Tensile adhesion strength:	> 1.5 N/mm <sup>2</sup>

\* at +23 °C and 50% relative humidity

Cleaning:	Clean tools immediately after use with ASO-R001.
Packaging:	1 kg, 3 kg, 10 kg and 18 kg containers. Component A and B are supplied at a pre-determined mix ratio.
Storage:	frost-free, cool and dry, ≥ +10 °C to +25 °C, 18 months in the original unopened packaging. Use opened packagings promptly.

**Note:** With frequent temperature change ASODUR-GBM can crystallize out. It is then necessary to warm up the product in water bath at +50 °C to +60 °C in order to use it after approx. 2 hours without restriction.

### Substrate preparation:

The cement-based substrates should be:

- dry, sound and have a good key
  - free from separating and adhesion inhibiting substances such as e.g. dust, laitance, grease, rubber marks, paint residues etc.
  - protected from the effects of moisture from the rear.
- Substrate preparation is to be carried out with reference to DIN EN 14879-1:2005, 4.2 following.

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Dependent on the condition of the substrate to be treated, use suitable mechanical methods to achieve a structured, open-textured surface, e.g. high pressure water jetting, scabbling, shot-blasting, planing etc. (Repair large voids and cracks beforehand with suitable products from the Schomburg range).

Appropriate to the particular substrate, the following criteria are also to be fulfilled:

## Cement-based areas:

- Concrete quality: min. C 20/25
- Screed quality: min. EN 13813 CT-C25-F4
  - Age: min. 28 days
  - Tensile adhesion strength:  $\geq 1.5 \text{ N/mm}^2$
  - Residual moisture:  $\leq 4 \%$  (CM method)
- Poured asphalt quality: min. AS-IC 15

## Product preparation:

Component A and component B 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 with a suitable mixer at 300 rpm. It is important to ensure the hardener is evenly dispersed. Stir until homogenous (free from streaks); mixing time approx. 3 minutes.

The minimum temperature during mixing should be  $+15 \text{ }^\circ\text{C}$ . Do not use mixed material directly from the packaging. Decant the material into a clean container and mix through thoroughly once again.

**Notes:** During product application, ensure that the material is evenly "flooded" over the prepared substrate. Irregularities lead to capillary active pores in the cured primer film and encourage the formation of bubbles, especially osmosis bubbles. To ensure a pore-free primer coat, apply a second coat.

Freedom from pores can also be ensured by applying a waterproof smoothing compound as the second coat. A smoothing mortar can be produced with the primer

resin and the addition of kiln dried quartz sand. When blending with aggregates (e.g. quartz sand) ensure it is dry and also at a temperature of  $+15 \text{ }^\circ\text{C}$ .

## Production of levelling / scratch coats:

ASODUR-GBM: 1.0 part by weight  
Quartz sand: approx. 1.0 part by weight  
(Grain size: 0.1 - 0.6 mm)  
Filler ASO-FF: approx. 2 - 3% by weight

The quartz sand is mixed into the homogenous resin hardener mixture. Ensure that the liquid and solid components are evenly mixed together.

Before application on vertical or steeply sloping surfaces it is recommended that with levelling / scratch coats the filler ASO-FF is added.

The addition rate lies between 4 - 5% by weight dependent on the degree of slope.

## Production of epoxy resin screeds:

Thickness: approx. 5 to 15 mm  
(single coat build-up)  
ASODUR-GBM: 1.0 part by weight  
Quartz sand: 8.3 parts by weight  
Grading \*): 0.06 - 1.5 mm diameter  
Thickness:  $> 15 \text{ mm}$  to 30 mm  
(single coat build-up)  
ASODUR-GBM: 1.0 part by weight  
Quartz sand \*): 8.3 parts by weight  
Grading: 0.06 - 3.5 mm diameter  
Compressive strength: approx.  $65 \text{ N/mm}^2$   
Flexural strength: approx.  $30 \text{ N/mm}^2$   
Consumption: approx.  $1.9 \text{ kg/m}^2$  per mm thickness

\*) coordinated grading curve

The quartz sand is filled into a batch mixer (e. g. type Zyklus or UEZ). Subsequently add the previously homogeneously mixed resin and hardener components. Ensure that the liquid and solid components are evenly mixed together.

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**Note:** Greater thicknesses are possible by multi-layer build-up. It is absolutely essential that material is compacted between layers at the given thickness.

## Methods of application / consumption:

### Sealing:

ASODUR-GBM is rolled, sprayed or painted on the surface in 2 coats.

Consumption: approx. 300 - 500 g/m<sup>2</sup> per coat  
For production of slip resistant surface structures broadcast quartz sand (grain 0.5 - 1.0 mm) between the two coats.  
Consumption: approx. 1 - 1.5 kg/m<sup>2</sup>

### Priming:

ASODUR-GBM is applied in one coat.

Consumption: approx. 300 - 500 g/m<sup>2</sup>  
When used in a two coat application once the first coat has hardened, broadcast the fresh primer of the second layer with quartz sand.

Broadcast the fresh primer with quartz sand.

(Grain size: 0.1 - 0.6 mm)

Consumption: approx. 0.8 - 1.0 kg/m<sup>2</sup>  
Thoroughly remove all unbonded broadcast material once the coating has cured and before the application of the finish coat.

### Levelling / scratch coat:

Firstly prime the surface with ASODUR-GBM.

Consumption: approx. 300 - 500 g/m<sup>2</sup>  
The smoothing compound is scratched on the surface in one coat.

Consumption of mixed smoothing compound:  
approx. 1.600 g/m<sup>2</sup> per mm thickness.

### Epoxy resin screed:

Firstly prime the surface with ASODUR-GBM.

Consumption: approx. 300 - 500 g/m<sup>2</sup>  
The epoxy resin screed prepared as described above is

applied on the surface in a minimum thickness of 5 mm and struck off and smoothed subsequently (use a power float - bladed or plate type).

Consumption of the screed admixture:  
approx. 1.9 kg/m<sup>2</sup> per mm thickness.

## Important advice:

- As a rule, SCHOMBURG products are supplied in working packs i.e. at a matched pre-determined mixing ratio. When deliveries are in large packs, they must be partially weighed out using scales. Always thoroughly stir the filled components before blending with the second component. This is to take place with a suitable rotating mixer e.g. Polyplan/ Ronden mixing paddle or similar. In order to prevent mixing errors, decant into a clean container and mix again. The mixing speed should be approx. 300 rpm. Ensure that no air is entrained. The temperature of the components should be at least +15°C. This is also valid for any fillers to be mixed in such as e.g. sands. The addition of the fillers for mixing is only to be carried out once both liquid components have been blended. Afterwards put the completely mixed material immediately on to the prepared substrate and promptly and thoroughly spread in accordance with the instructions in the technical data sheet. The use of a short nap nylon roller (6 mm) with a textured polyamide cover or similar, is recommended. Always stir one component products thoroughly before use.
- Higher temperatures shorten the working life. Lower temperatures extend the working life and setting time. Material consumption also increases at lower temperatures.
- Colours: Minor colour variations caused by different production batches and raw material fluctuations are unavoidable. Remember this when applying coatings. Carry out adjacent adjoining areas with the same production batch (same batch number on the packaging).

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- The bond of individual coats to one another can be heavily impeded by moisture penetration and contamination between the individual coats. Coating works require a substrate temperature of min. 3°C above the dew point temperature.
- If there is a longer waiting time between the individual coats or if already coated areas need to be renewed with liquid resins after a long period of time, the surface is to be well cleaned and thoroughly abraded. Afterwards install a completely new pinhole-free coating.
- Synthetic resin products or surface protection systems must be protected from moisture (e.g. rain, melt water) for approx. 4-6 hours after their application. Moisture produces a white discolouration and/or stickiness to the surface and can lead to interference in the curing process. Discoloured and/or sticky surfaces are to be removed e.g. by planing or mechanical blast cleaning techniques and coated anew.
- Consumption quantities given are values determined by calculation without additions for surface roughness or absorption, levelling and residual material in the packaging. We recommend adding a safety factor of 10% to the calculated consumption quantities.
- Applications, which are not clearly mentioned in this technical data sheet may only be carried out after consultation with and written confirmation from SCHOMBURG technical services.

Please observe a valid EU safety data sheet.

**GISCODE: RE 1**