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## **Technical Data Sheet**

## ASODUR®-SG3-Superfast

Art.-No. 2 03543

## Rapid setting resin based primer, mortar, drainage resin and casting resin

ASODUR-SG3-Superfast is a two component epoxy resin with the following properties:

- Solvent free
- Low viscosity
- Rapid cure
- Overcoat after 3.5 hours
- Withstands heavy mechanical loading
- Watertight
- Consistency can be adjusted with varying aggregate sizes
- Moisture barrier
- Water vapour impermeable



eaction to Fire Classe E Hazardous substances

5.3 of EN 1504-2

## Areas of application:

- for priming cement-based surfaces, which are to be coated with ASODUR-/INDUFLOOR systems
- for producing repair mortars, which will be trafficked again promptly
- for producing levelling compounds and scratch coats as a substrate preparation measure before applying
- can be used where there is moisture penetration from
- can be used to flood repair cracks in screeds to **DIN EN 13813**
- for producing epoxy resin screeds, repair mortars and drainage mortars
- rapid primer for Hot-Spray Polyurea systems (GEPOTECH)

#### **Technical Data:**

Basis: two component epoxy resin

Colour: transparent

 $650 \pm 100$  mPa.s Viscosity:

at +25° C

100:47 parts by weight Mixing ratio:  $1.08 \pm 0.02 \,\mathrm{g/cm^3}$ Density: approx. 15 - 20 mins. Pot life:

at +23° C

min. approx. +5° C, Application temp.:

max. approx. +30° C

Foot traffic after: approx. 3.5 hrs

at +23° C

Overcoat after: approx. 3.5 hrs,

max. 24 hrs at  $+23^{\circ}$  C after approx. 7 days

at +23° C

Compressive strength: approx. 85 N/mm<sup>2</sup> (mortar) approx. 25 N/mm<sup>2</sup> (mortar) Flexural strength:

 $1.9 \, \text{N/mm}^2 \, (3.5 \, \text{hrs})$ Tensile strength:

damp substrate)

 $2.5 \text{ N/mm}^2 (3.5 \text{ hrs},$ Tensile strength:

dry substrate)

Substrate tensile strength: 1.5 N/mm<sup>2</sup>

Water vapour

Fully cured:

permeability:  $S_D > 50 \text{ m}$ 

(Class III according to

EN 1504-2)

## Cleaning:

Thoroughly clean tools immediately after use with INDU-IB Cleanser.

#### **Packaging:**

ASODUR-SG3-Superfast is available in 1 kg, 3 kg and 6 kg containers. Components A and B are delivered at a predetermined mixing ratio.

#### Storage & Shelf Life:

6 months when stored dry and cool above  $+10^{\circ}$  C in the original unopened packaging.

#### **Substrate preparation:**

The area to be treated must be:

- dry, firm, sound and have a good key
- free from separating and adhesion inhibiting substances such as dust, laitance, grease, oil, rubber marks, paint residues and similar
- Pre-treat possible oil marks with ASO-R008/ INDU-OilCleanser

Use suitable means to prepare the substrate dependent on its condition such as e.g. sweeping, vacuuming, brushing, planing, scabbling, grit-blasting, shot-blasting, high pressure water jetting.

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## ASODUR®-SG3-Superfast

The following criteria are to be observed dependent on the particular substrate:

Cementitious surfaces:

min. C 20/25 • Concrete quality:

 Screed quality: min. EN 13813 CT-C25-F4

• Render quality:

min. 28 days Age:

Tensile adhesion

strength:  $= 1.5 \, \text{N/mm}^2$ 

(Render: 0,8 N/mm<sup>2</sup>)

#### Notes on residual moisture:

Residual moisture of cement-based substrates: dry or damp (conforming to Def. RiLI StB)\* \*"Guideline for the protection and restoration of concrete

constructions" part 2, clause 1.2.5 "concrete moisture".

### "dry":

An approximately 2 cm deep freshly produced cut out area may not, as a result of drying, become visibly lighter. (Where doubt exists, the concrete is considered dry when it exhibits equilibrium moisture content for the climate 23/50 i.e. dependent on the concrete classification other absolute values serve for "dry").

### "damp":

The surface appears matt damp but may not have a shiny film of water. The pore system within the concrete substrate may not be saturated i.e. applied water droplets must be absorbed and the surface must appear matt once again after a short while.

#### **Product preparation:**

Components A (resin) and B (hardener) are delivered at a pre-determined mixing ratio. Tip component B into component A. Ensure that the hardener drains completely from its container. Blending of both components together is to be carried out with a suitable mixer at approx. 300 rpm (e.g. drill with paddle). It is important to also stir from the sides and the bottom to ensure that the hardener is evenly dispersed. Stir until the mix is homogenous (free from streaks); mixing time approx. 3 minutes. The material temperature during mixing should be approx. +15° C. Do not use

mixed material directly from the packaging! Decant the material into a clean container and mix through thoroughly once again.

#### Notes:

When using the product ensure that it is applied by flooding evenly over the prepared substrate. Irregularities lead to capillary active pores in the cured priming coat and promote the formation of bubbles especially osmosis bubbles. To ensure the priming coat has blocked the pores, apply a second coat. Pore blocking can also be ensured through the application of a second layer of a dense smoothing mortar. This smoothing mortar is produced from the priming resin with the addition of quartz sand. When adding aggregates (e.g. quartz sand) ensure that the aggregate is dry and is also at a temperature of approx. +15° C.

### Production of levelling / scratch coats:

ASODUR-SG3-Superfast: 1.0 part by weight 1.0 part by weight Quartz sand:

(grade: e.g. 0.1–0.6 mm)

INDU-FibreFiller: approx. 2 % by weight to the

mixed material

The quartz sand is mixed with the already mixed and decanted resin and hardener components. Ensure that the liquid and solid components are evenly blended together. Before application on vertical or steeply sloping surfaces it is recommended that with levelling/ scratch coats INDU-FibreFiller is added.

### Production of epoxy resin screeds:

a.)

Thickness: approx. 5-15 mmASODUR-SG3-Superfast: 1,0 part by weight Quartz sand: 6.5 parts by weight 0.06-1.5 mm ø Grading:

Compressive strength: approx. 85 N/mm<sup>2</sup> approx. 25 N/mm<sup>2</sup> Flexural strength:

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b.)

Thickness: 9-40 mm

ASODUR-SG3-Superfast: 1.0 part by weight Quartz sand: 9.5 parts by weight Grading: 0.06–3.5 mm Ø
Compressive strength: approx. 85 N/mm²
Flexural strength: approx. 25 N/mm²

Place the predetermined quantity of quartz sand in a forced action mixer (e.g. type Zyklos or UEZ). Subsequently add the previously homogenously mixed resin and hardener components. Ensure that the liquid and solid components are evenly mixed together. It is also possible to use INDU-DecorQuarz (0.4–0.8 mm) in internal areas, to produce coloured screeds.

### Production of the repair mortar:

Thickness: up to 10 mm
ASODUR-SG3-Superfast: 1.0 part by weight
Quartz sand: 1.0 part by weight
Grading: 0.1–0.6 mm ø

## Production of the drainage mortar:

ASODUR-SG3-Superfast: 1.0 part by weight Quartz sand: 25.0 parts by weight Grading: 1.0–4.0 mm ø aprox. 20 N/mm² Flexural strength: approx. 5 N/mm²

## **Method of application / consumption:** Priming:

Apply ASODUR-SG3-Superfast in two coats.

Consumption: approx. 300–500 g/m<sup>2</sup> per coat. Broadcast quartz sand into the freshly applied primer (Grade: e.g. 0.2 - 0.7 mm).

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Consumption: approx. 0.8-1.0 kg/m<sup>2</sup>.

#### Sealing:

Apply ASODUR-SG3-Superfast in two coats. Consumption: approx. 400–800 g/m² per coat. For producing a slip resistant surface structure broadcast quartz sand (Grade: 0.5 - 1.0 mm or 0.7 - 1.2 mm). Consumption: approx. 1.0–1.5 kg/m².

Once hardened carefully remove all non-bound quartz sand before roller applied or pourable coatings, scratch coatings or screeds are applied.

#### Levelling / scratch coat:

Firstly prime the floor with ASODUR-SG3-Superfast.

Consumption: approx.  $300-500 \text{ g/m}^2$ .

The mixed smoothing compound is skim applied in one coat. Consumption of fine smoothing compound: approx. 1.9 kg/m²/mm per thickness

#### Epoxy resin screed:

Firstly prime the floor with ASODUR-SG3-Superfast. Consumption: approx.  $450-700 \text{ g/m}^2$ .

Apply the mixed screed to the freshly primed area at a minimum thickness of approx. 5mm, strike off with a lath and finish off mechanically smoothen (use a blade or plate power float).

Consumption:

approx. 2.0 kg/m²/mm per thickness

#### **Health & Safety:**

Once cured ASODUR-SG3-Superfast is harmless. Note: code of practice for handling epoxies distributed by the building industry professional association www.bgbau.de or www.gisbau.de.

#### Important advice:

• As a rule SCHOMBURG products are supplied in working packs i.e. at a predetermined mixing ratio. With deliveries in large containers, part quantities will need to be weighed using scales. Always thoroughly stir the filled components and only then blend with the second component. This is to be carried out with a suitable rotary mixer e.g. Polyplan/Ronden mixing paddle or similar. In order to exclude mixing errors, decant into a clean container and remix. The mixing speed should be 300 – 400 rpm. Ensure that no air is entrained. Higher speeds drag unnecessary air quantities into the product whilst lower speeds do not result in a good blend or require too long a mix time (pot life). The temperature of the components should be at a minimum of  $+15^{\circ}$  C. This is also applicable to any fillers, e.g. sand, to be mixed in. The addition of any fillers is carried out after both liquids have

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been blended. Afterwards tip the completely mixed material immediately onto the prepared substrate and promptly thoroughly spread in accordance with the instructions in the technical data sheet. Always stir one component products before using.

- In exterior areas the epoxy resin tends to yellow under UV light.
- The bond between the individual coats can be heavily impeded by the influence of moisture or contamination between successive applications.
- If there is a long time period between coatings or if areas need to be re-coated after a long time period, then the old surface must be well cleaned and thoroughly abraded, after which a completely new pore free sealing coat should be applied. It is not sufficient to simply overcoat.
- Protect surface protective systems from moisture (e.g. rain) for approx. 4 6 hours after application.
   Dampness produces a white discolouration and/or stickiness on the surface and can impede the cure.
   Discoloured and/or sticky surfaces should be taken off e.g. by abrading 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.
- Cured product residues are to be disposed of under waste disposal classification AVV 150106.

Please observe a valid EU safety data sheet!

This technical data sheet is a translation from German and does not consider local building codes or legal requirements. It shall be used as general reference for the product. Legally binding is only the latest German technical data sheet or the latest data sheet from one of our foreign subsidiaries inside their sales territory.

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