



Technical Data Sheet

ASODUR®-B351 INDUFLOOR-IB3357

Universal industrial and trade floor coating

Art.-No 2 05796

CE 1119	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2 – 8 D-32760 Detmold 12 2 05796	
EN 1504-2 ASODUR-B351 Surface protection product - Coating	
Principle 5.1/6.1	
Capillary water absorption and water permeability	$w < 0.1 \text{ kg/m}^2 \times \text{h}^{0.5}$
Tensile adhesion strength by pull-off test:	$\geq 1.5 \text{ (1.0) N/mm}^2$
Abrasion resistance:	Loss in mass $\leq 3000 \text{ mg}$
Impact resistance:	Class II
Compressive strength:	Class I
Resistance to strong chemical attack:	Loss in hardness $< 50\%$
Reaction to fire:	Class E
Hazardous substances:	In compliance with 5.3 of EN 1504-2

CE	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2 – 8 D-32760 Detmold 17 2 05796	
EN 13813 ASODUR-B351 Synthetic resin screed / synthetic resin coating for application in interior rooms	
SRB2,0-ARO,5-IR8	
Reaction to fire to K 2010/85/EU	BI1
Release of corrosive substances	SR
Compressive strength	C60
Flexural strength	F30
Resistance to wear	ARO.5
Tensile strength	B2.0
Impact resistance	IR8

- floor surfaces in the foodstuffs industry and commercial kitchens, workshops, laundries, on loading ramps, roadways etc.
- surfaces with agricultural use
- as a flowing mortar with the addition of 50% quartz sand of grain size 0.1 – 0.6 mm

Technical Data:

Basis:	2 component epoxy resin
Standard colours:	≈ RAL 7032, ≈ RAL 7030
Viscosity at +20 °C:	approx. 1,200 mPas ± 15%
Mixed density*:	approx. 1.41 g/cm ³ at +23 °C
Mix ratio:	100:24 parts by weight
Pot life:	approx. 45 mins at +10 °C approx. 30 mins at +20 °C approx. 10 mins at +30 °C
Cure temperature (material / substrate):	+8 °C to +30 °C
Foot traffic after*):	approx. 12 hrs
Overcoat after*):	approx. 12 hrs / max. 24 hrs
Fully cured*):	after approx. 7 days
Compressive strength:	approx. 70 N/mm ²
Flexural strength:	approx. 44 N/mm ²
Shore-D-hardness:	approx. 72
Tensile adhesion strength:	$\geq 1.5 \text{ N/mm}^2$
Cleaning:	clean work tools thoroughly with ASO-R001 immediately after use
Packaging:	15 and 30 kg containers. Components A and B are supplied at a pre-determined mix ratio
Storage:	frostfree, cool and dry, $\geq +10 \text{ °C}$ to +25 °C, 24 months in the original unopened containers. Use opened containers promptly.

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

- two component epoxy resin
- solvent free following Deutsche Bauchemie e.V. recommendations
- viscoplastic
- pigmented
- high resistance to mechanical loads and chemical exposure
- high compressive and flexural strengths
- resistant to a range of acids and alkalis as well as conventional cleaning agents at application concentrations
- resistant to weathering
- does not taint food
- fire classification B (DIN EN 13501) with 50% by weight quartz sand addition
- geprüfte Rutschhemmungsklassen R 9 bis R12

Areas of application:

ASODUR-B351 is used as a heavy duty industrial floor coating on cement-based areas such as concrete and screed for:

- production areas and warehousing

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Substrate preparation:

Surfaces to be treated must be:

- dry, sound, load-bearing and have a good key
- free from separating and adhesion inhibiting substances such as dust, laitance, grease, rubber marks, paint residues etc.
- protected against moisture penetration from the rear

Substrate preparation is to be carried out with reference to DIN EN 14879-1:2005, 4.2 following.

Dependent on the condition of the substrate to be treated, use suitable mechanical preparation methods, e.g. high pressure water blasting, scabbling, shot blasting, planing etc, with which a textured, open surface is achieved. (Repair large voids and cracks beforehand with a suitable product from the SCHOMBURG range).

Appropriate to each 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
Tensile adhesion strength: $\geq 1.5 \text{ N/mm}^2$
- Render quality: min. P IIIa / P IIIb
Tensile adhesion strength: approx. 0.8 N/mm^2

Product preparation

Components A (resin) and B (hardener) are supplied at a pre-determined mix ratio. Tip component B into component A. Ensure the hardener drains completely from its container. Mix both components together with a suitable stirrer at approx. 300 rpm (e.g. drill with paddle). It is important to also stir from the sides and the bottom to ensure even distribution of the hardener. Stir until the mix is homogenous (free from streaks); mix time approx. 3 minutes. The material should be at a temperature of $+15 \text{ }^\circ\text{C}$ during mixing.

Do not use the mixed material directly from the packaging. Decant the mix into a clean mixing bucket and stir through once again.

Producing a flowing mortar:

The flowing mortar consists of:

ASODUR-B351: 1.0 part by weight

Quartz sand: 0.5 part by weight
(grain size: 0.1 - 0.6 mm)

Mix the quartz sand into the previously homogenously mixed and decanted resin and hardener components.

Ensure that the liquid and solid constituents are evenly blended. With the addition of quartz sand, ensure it is kiln dried and, as necessary, other aggregates also have a temperature of approx. $+15 \text{ }^\circ\text{C}$. Prior to application to vertical or sloped surfaces it is recommended that the filler ASO-FF is added for roller or trowel application.

The addition rate for for trowel application approx.

2-5 parts by weight dependent on the degree of slope.

Method of application / consumption:

ASODUR-B351 is applied by trowel. Before application of ASODUR-B351, the substrate must be prepared and:

- Primed with ASODUR-GBM
- Whilst still wet, broadcast the primer with 0.1 - 0.6 mm diameter quartz sand.
- Where there are large irregularities apply a scratch coat to the uneven area (refer to a valid technical data sheet for ASODUR-GBM universal primer)

Thin coating (smooth surface),

thickness: approx. 1.0 mm

Once the primer layer has hardened and non-bound quartz has been removed, trowel apply one coat of ASODUR-B351.

Consumption: approx. $1,400 \text{ g/m}^2$ per mm thickness

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Thick coating (smooth surface):

Trowel apply one coat of ASODUR-B351 filled with quartz sand (0.1-0.6 mm diameter) at a ratio of 2 : 1 parts by weight.

Consumption (pure binder):

approx. 1,200 g/m² per mm thickness

Consumption (quartz sand addition):

approx. 600 g/m² per 1 mm thickness

Consumption (prepared mix):

approx. 1,800 g/m² per 1 mm thickness

To de-aerate the applied coating surface always roll with a spiked roller to prevent bubble formation.

Thick coating (anti-slip surface):

Trowel apply one coat of ASODUR-B351 filled with quartz sand (0.1-0.6 mm diameter) at a ratio of 2 : 1 parts by weight.

Consumption (prepared mix):

approx. 1,800 g/m² per 1 mm thickness

In order to de-aerate the applied flowable coating, it is imperative to roll the area in a criss-cross manner with a spiked roller to prevent bubble formation. Dependent on the requirements for slip resistance, using a criss-cross manner, roll onto the hardened coating a layer of ASODUR-B351 for broadcasting.

Consumption: approx. 300-400 g/m².

Broadcast the fresh layer with quartz sand to excess (aggregate 0.1-0.6 mm, 0.5-1.0 mm, or 1.0-1.6 mm*, in accordance with the required anti-slip factor).

Consumption of broadcasting sand: approx. 1.5 kg/m²

Once cured, carefully remove all non-bound quartz sand before applying the finish coat.

(*e. b. Quarzwerke GmbH, Frechen, Germany)

Top seal coat: Apply one coat of ASODUR-B351 to the broadcast layer with a short haired paint roller and spread in a criss-cross manner.

Consumption: approx. 400 - 800 g/m².

Advice:

Wait approx. 12 hours up to max. 24 hours between successive coats at +23 °C and 65% relative humidity.

Special colours:

With the following special colours, a minimum consumption of 2.8 kg/m² is required:

RAL 1006, RAL 1007, RAL 1012, RAL 1016, RAL 1017, RAL 1021, RAL 1023, RAL 1028, RAL 1032, RAL 1037, RAL 2001, RAL 2002, RAL 2003, RAL 2009, RAL 5020.

Notes:

Prior to application to vertical or sloped surfaces it is recommended that the filler ASO-FF is added. The addition rate is between 2-5% by weight. With residual moisture levels > 4% and with moisture penetration from the rear use the moisture barrier ASODUR-SG3 (refer to the technical data sheet).

Important advice:

- As a rule SCHOMBURG products are supplied pre-packed i.e. at a predetermined mix 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 approx. 300 rpm. Ensure that no air is entrained. The temperature of the components should be at a minimum of +15 °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 been blended. Afterwards tip the completely mixed material immediately onto the prepared substrate and promptly thoroughly spread in accordance with the instructions

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in the technical data sheet, the use of a short haired Nylon paint roller (6 mm) with a textured polyamide cover or similar is recommended. Always thoroughly stir one component products before using.

- Higher temperatures shorten the working time. Lower temperatures lengthen the working time and setting time. Material consumption is also increased at lower temperatures.
- Minor colour variations due to different production batches and raw material fluctuations are unavoidable. This should be considered when applying coatings. Neighbouring sections should be completed with the same production units (see batch number on the packaging).
- The bond between the individual coats can be heavily impeded through the influence of moisture or contamination between successive applications. Coating works require a substrate temperature of min. 3°C above the dew point temperature.
- If there are long time periods between coatings or if already treated surfaces are to be re-coated after a long time period, then thoroughly clean and abrade the surface followed by a completely new pore-free coat.
- Surface protective systems must be protected for approx. 4 - 6 hours from dampness after application (e.g. rain, melt water). 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.
- Consumption quantities given are values determined by calculation without allowance for surface roughness or absorption, levelling or residual material in the container. We recommend a calculated safety level of an extra 10% on the calculated consumption quantity.
- 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 can be disposed of under waste disposal code: AW 150106.

Please observe a current valid EU safety data sheet.

GISCODE: RE 1

ASODUR®-B351

Resistance list

Test liquids	Concentration (%)	Classification		
		Low resistance (≤ 8 hours)	Medium resistance (≤ 72 hours)	High resistance (≤ 14 days)
Inorganic acids				
Nitric acid	15			■
Sulphuric acid	15			■
Hydrochloric acid	30			■
Organic acids				
Formic acid	2			■
Citric acid	15			■
Lactic acid	20			■
Alkalis				
Caustic soda	20			■
Ammonia	25			■
Solvents				
Kerosine	neat			■
Petrol	neat			■
Diesel	neat			■
Ethanol	neat		■	
Oils				
Motor oil	neat			■
Brake fluid	neat			■
Heating oil	neat			■
Aqueous solutions				
De-icing salt solution	35			■

All data were determined under laboratory conditions at +20°C. Deviations due to higher temperatures, local factors and ambient conditions are possible. Slight visible surface changes or minor swelling, without impeding the functionality of the waterproof membrane cannot therefore be excluded. In the case of doubt, we recommend a suitability test is carried out related to the project.

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