ASODUR®-B351

Universal industrial and commercial floor coating

Material number	Contents	Unit of quantity	Packaging	Colour
205796045	15	KG	Combination packs	≈ RAL 3009, oxide red
205796145	30	KG	Set	≈ RAL 3009, oxide red
205796200	5,8	KG	Bucket	Transparent
205796041	15	KG	Combination packs	≈ RAL 7032 pebble grey
205796042	15	KG	Combination packs	≈ RAL 7030 stone grey
205796046	15	KG	Combination packs	≈ RAL 7016, anthracite grey
205796047	15	KG	Combination packs	≈ RAL 7035 light grey
205796048	15	KG	Combination packs	≈ RAL 1015 light ivory
205796141	30	KG	Set	≈ RAL 7037, dust grey
205796143	30	KG	Set	≈ RAL 7032 pebble grey
205796144	30	KG	Set	≈ RAL 7030 stone grey
205796146	30	KG	Set	≈ RAL 7016, anthracite grey
205796147	30	KG	Set	≈ RAL 7035 light grey
205796148	30	KG	Set	≈ RAL 1015 light ivory
205796176	30	KG	Set	≈ RAL 7038, agate grey
205796053	15	KG	Combination packs	≈ RAL 1001 beige
205796055	15	KG	Combination packs	≈ RAL 7040, window grey
205796056	15	KG	Combination packs	≈ RAL 5014, pigeon blue
205796155	30	KG	Set	≈ RAL 1001 beige
205796157	30	KG	Set	≈ RAL 7040, window grey
205796158	30	KG	Set	≈ RAL 5014, pigeon blue

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Product features

- High compressive and flexural strengths
- Fire class B (DIN EN13501) with 50 wt.% quartz sand addition
- weather, frost and thaw cycle resistant
- Solvent free
- withstands high mechanical and chemical loads
- softener-resistant (car tyres)
- Resistant to a wide range of acids and alcaline solutions, cleaning materials in application concentration

Advantages

- pigmented
- self-levelling
- can be economically filled with quartz sand
- suitable for indirect food contact
- anti-slip application (up to class R12)

Areas of application / surface protection

- as floor coating of cement-based substrates
- For interior and exterior use

Existing test certificates

- Reaction to fire
- Conformity DIN EN 13813
- Slip resistance classes
- Usability as floor covering in the food sector
- Suitability for indirect food contact
- Testing within the scope of DIN EN 13813 Tensile adhesion strength
- Impact resistance testing DIN EN ISO 6272-1:11:2011
- Emission tests

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Technical Data

Material properties

Product components	2 component system
Base material	Epoxy resin
Density, ready to use product (ISO 1183-1)	approx. 1.41 kg/dm³
Flexural strength (DIN EN 196-1)	approx. 44 N/mm²
Compressive strength	approx. 70 N/mm²
Adhesion	≥ 1.5 N/mm²
Shore-D hardness	approx. 72
Viscosity, ready to use product [value]	approx. 1200 mPa*s
Classification of the reaction to fire in accordance with DIN EN 13501-1	Bfl - s1

Mixing

Mix ratio, component A	100 weight proportion
Mix ratio, component B	24 weight proportion
Mix ratio, addition of ASO-FF levelling / scratch coat	from 0.02 weight proportion to 0.03 weight proportion
Mix ratio, addition of quartz sand (Ø 0.1 – 0.6 mm)	50 weight proportion
Mix ratio, addition of ASO-FF (inclined surfaces)	approx. 0.01 - 0.05 weight proportion
Mixing time	approx. 3 minutes

Application

Substrate temperature	from 10 °C to 35 °C
Max. relative humidity	80 %
Pot life	approx. 30 minutes
Consumption pro m² and mm layer thickness	approx. 1.4 kg
Minimum reaction temperature	min. 10 °C
Overcoat (min.)	after 12 hours
Foot traffic after	approx. 12 hours
Application temperature	from 10 °C to 35 °C
Overcoat (max.)	to 24 hours
Hardening time / full resilience	approx. 7 days

Application technology

Aids/tools

- Stirrer (approx. 300 rpm)
- Circular cage
- Filler
- spiked roller
- toothed squeegee with triangular teeth

Substrate preparation

Requirement for substrate

1. Load-bearing
2. Firm
3. Grippy
4. Dry
5. Protected from moisture penetration from the rear
6. 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.

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Substrate quality class

	Concrete / PCC mortar	Screed	Plaster
Quality	at least C20/25 in accordance with DIN EN 1504-3	at least CT-C25-F4 in accordance with DIN EN 13813	at least P IIIa/P IIIb
Tensile adhesion strength	≥ 1.5 N/mm²	≥1.5 N/mm²	≥ 0.8 N/mm²
Age	at least 3 months	at least 28 days	at least 28 days
Moisture content	≤ 4 CM-%	≤ 4 CM-%	≤ 4 CM-%

Preparing the surface

1. Prime absorbent substrates with ASODUR-GBM in two application steps until pore sealed.
2. Sprinkle the fresh, final priming coat with quartz sand (Ø 0.1-0.6 mm).
3. In case of severe surface irregularities, a scratch coat is applied depending on the roughness depth. (See valid technical data sheet for ASODUR-GBM)

Usage

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. Mix thoroughly with the mixer until a homogeneous consistency.
6. The hardener must be distributed evenly.
7. The mixing time is ca. 3 minutes.
8. Decant the mass into a clean bucket.
9. Stir meticulously again.
10. Aggregates are mixed into the ready-mixed and re-potted material.
11. The aggregates must have a material temperature of approx. +15 °C.
12. Quartz sand used must be kiln-dried.
13. For vertical and sloping surfaces we recommend the addition of 1 - 5 wt. -% ASO®-FF.
14. Add ASO®-FF in portions using a suitable stirring device.
15. Stir meticulously again.

As thin coating (approx. 1 mm layer thickness)

1. The substrate must be primed according to the valid technical data sheet.
2. Apply ASODUR®-B351 (without adding quartz sand) in one application step using trowel techniques.
3. To deaerate the applied self-levelling flowable coating, it is imperative to roll the surface in a criss-cross pattern with a spiked roller to prevent bubble formation.
4. Consumption: approx. 1.4 kg/m²

As thick layer coating (approx. 2 mm layer thickness)

1. The substrate must be primed according to the valid technical data sheet.
2. Mix ASODUR®-B351 with quartz sand Ø 0.1-0.6 mm (ratio 2:1 parts by weight). Apply ASODUR®-B351 (binder: approx. 1.2 kg/m²; quartz sand: 600 g/m²; per 1 mm layer thickness) in one application step with trowel techniques.
3. Consumption: approx. 1.8 kg/m² of mixture for approx. 1 mm layer thickness
4. To deaerate the applied self-levelling flowable coating, it is imperative to roll the surface in a criss-cross pattern with a spiked roller to prevent bubble formation.

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Slip-resistant surface

1. Depending on the slip resistance requirements, an interspersing layer with ASODUR®-B351 (approx. 300-400 g/m²) is rolled in a criss-cross pattern on the hardened coating surface.
2. The still fresh roller coating is sprinkled with kiln-dried quartz sand (Ø 0.1-0.6 mm / 0.5-1.0 mm / 1.0-1.6 mm; approx. 1.5 kg/m²). After the interspersing layer has hardened, the unbound quartz sand must be meticulously removed.
3. For top sealing, ASODUR®-B351 (approx. 400-800 g/m²) is applied evenly to the interspersing layer in one application step and distributed in a criss-cross pattern.

Cleaning tools

Immediately after use, clean tools with ASO-R001.

Storage conditions

Storage

Store in a frost-free, cool and dry place. At min. 10 - 25 °C for 24 months in the original canister. Promptly use opened canister.

Disposal

Hardened product leftovers can be disposed of in accordance with disposal code AVV 15 01 06.

Notes

- The indicated consumption quantities are calculated values without additions for textured surface roughness and absorbency, level compensation, and residual material in the canister. 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 waiting time, the old surface must be well cleaned and thoroughly ground. Then apply a complete pore-free new coating.
- Slight colour differences, caused by different production batches and raw material fluctuations, are unavoidable. Neighbouring surface sections should be coated using the same production batch (same batch no. on the delivered packaging).
- A minimum consumption of 2.8 kg/m² is required for the following special colours: 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
- 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.
- The surface can be scratched by exposure to grinding abrasion. Particularly visible with dark shades. This will not have a negative impact on proper functioning.
- In order to maintain the surface quality and appearance in the long term, regular care of the surface with suitable cleaning materials and care products is recommended.
- 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".

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

Observe applicable safety data sheet!

GISCODE: RE 30

ASODUR®-B351

Annotations

Conformity / Declaration / Verification

CE
1119

SCHOMBURG GmbH & Co. KG
Aquafinstraße 2–8 · D-32760 Detmold
12
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EN 1504-2
ASODUR-B351
Oberflächenschutzprodukt – Beschichtung

Prinzip 5.1/6.1

Kapillare Wasseraufnahme und Wasser-Durchlässigkeit:	$w < 0{,}1\ kg/m^2 \times h^{0,5}$
Abreißversuch zur Beurteilung der Haftfestigkeit:	≥ 1,5 (1,0) N/mm²
Abriebfestigkeit:	Massenverlust: ≤ 3000 mg
Schlagfestigkeit:	Klasse II
Druckfestigkeit:	Klasse I
Widerstandsfähigkeit gegen starken chemischen Angriff:	Härteverlust < 50 %
Brandverhalten:	Klasse E
Gefährliche Stoffe:	Übereinstimmung mit 5.3 (EN 1504-2)

CE

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Aquafinstraße 2–8 · D-32760 Detmold
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EN 13813
ASODUR-B351
Kunstharzestrich/Kunstharzbeschichtung für Anwendung in Innenräumen

SR-B2,0-AR0,5-IR8

Brandverhalten gemäß K 2010/85/EU	B_{fl}
Freisetzung korrosiver Substanzen	SR
Druckfestigkeit	C60
Biegezugfestigkeit	F30
Verschleißwiderstand	AR0,5
Haftzugfestigkeit	B2,0
Schlagfestigkeit	IR8

Colours

- ≈ RAL 7040, window grey
- ≈ RAL 7038, agate grey
- ≈ RAL 7037, dust grey
- ≈ RAL 7035 light grey
- ≈ RAL 7032 pebble grey
- ≈ RAL 7030 stone grey
- ≈ RAL 7016, anthracite grey
- ≈ RAL 5014, pigeon blue
- ≈ RAL 3009, oxide red
- ≈ RAL 1015 light ivory
- ≈ RAL 1001 beige

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Chemical durability

Test fluid	Concentration (%)	Classification		
		low resistance (≤ 8 hours)	moderate 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				
Sodium hydroxide	20			■
Ammonia	25			■
Solvent				
Kerosene	neat			■
Petrol	neat			■
Diesel	neat			■
Ethanol	neat		■	
Oils				
Engine oil	neat			■
Brake fluid	neat			■
Heating oil	neat			■
Aqueous solution				
De-icing salt-solution	35			■

All information has been determined under lab conditions at +20 °C, deviations due to higher temperatures, local conditions and ambient conditions are possible.
It is not possible to fully exclude minor visible surface changes or slight swelling that does not affect the functionality of the waterproofing.
In case of doubt, we recommend an object-specific suitability test.