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SCHOMBURG

Technical Data Sheet

ASODUR®-LE

Lightweight epoxy resin screed

Art.-No. 2 05797

CE
SCHOMBURG GmbH & Co. KG **Aquafinstraße 2 – 8** **D-32760 Detmold** 19 2 05797-01
EN 13813 **ASODUR-LE** Resin-based screed for interior rooms
SR-B1,5-IR20-AR0,5-C30-F10

Reaction to Fire	Class E
Release of corrosive substances	SR
Compressive strength	C30
Flexural strength	F10
Resistance to wear	AR0,5
Tensile strength	B1,5
Impact resistance	IR20

GEV-EMICODE EC 1 PLUS very low emission

ASODUR-LE is a three-component lightweight epoxy resin screed. ASODUR-LE consists of a two-component, solvent free, low viscosity epoxy resin (as binder) and a special lightweight aggregate as the third component. After installation ASODUR-LE has a weight per area of only approx. 18 kg/m² at 15 mm minimum thickness. In the hardened state ASODUR-LE possesses high abrasion resistance, heat insulating properties and impact sound minimising properties when used with conventional impact sound insulation.

Areas of application:

ASODUR-LE is used in the renovation of old buildings

- on wooden floors as a substrate for the installation of ceramic tiled finishes in wet areas when in combination with the necessary waterproofing measures.
- on old wooden floorboards as a substrate for ceramic floor tiles, natural stone, floor coatings, parquet or carpet.
- on cement-based substrates, on asphalt floors etc.

Technical Data:

	Binder	finished screed
Base:	epoxy resin	
Viscosity/Consistency:	800 mPa s	mortar-like
Density*):	approx. 1.03 g/cm³	approx. 1.18 g/cm³
Mixing ratio:	100 : 43 parts by weight (resin : hardener)	1 : 5 parts by weight (binde : aggregate)
Curing temperature (Material/substrate):	at least +8 °C, max. +30 °C, at max. 80% rel. humidity	
Pot life*):	approx. 40 mins	approx. 45 mins
Foot traffic after*):		approx. 16 hrs.
Overcoat after*):		approx. 16 hrs.
Full load after*):		approx. 7 days
Compressive strength:		approx. 30 N/mm²
Flexural strength:		approx. 10 N/mm²

*) at +23 °C and 50% rel. humidity

Consumption: approx. 1.18 kg/m² per mm thickness

Cleaning: Clean tools immediately after use with ASO-R001.

Packaging: 30 kg and 60 kg units

The packaging contents are composed of:

	30 kg	60 kg
ASODUR-LE (binder)	5 kg	10 kg
Special lightweight aggregate	2 × 12.5 kg	4 × 12.5 kg

Storage: Binder: 18 months when stored frost-free, cool and dry in the original unopened container, above +10 °C. Protect from direct sunlight and cold. Storage should be in compliance with the regulations for storing products dangerous to watercourses. Observe EU safety data sheet.

ASODUR®-LE

Surface preparation:
Existing substrates must be load-bearing, dust free and dry. Damaged wooden and floorboard substrates are to be replaced and loose boards are to be secured (e.g. screws etc.). Leave a gap of at least 5 mm against adjacent building elements by placing the self-adhesive edge isolating strip RD-SK50 before applying the lightweight screed.

Product preparation:
Production of the lightweight epoxy resin screed ASODUR-LE:
5 parts by weight special lightweight aggregate: 1 part binder (ASODUR-LE).
Components A (resin) and B (hardener) are delivered in a predetermined mixing ratio. Tip component B into component A. Ensure that the hardener drains completely from its container. Mixing of the components is to be carried out with a suitable mixer at approx. 300 min^{-1} (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 striations). Mixing time approx. 5 minutes. The material temperature during mixing should be +15 °C. Place the determined weight of lightweight aggregate into the forced paddle mixer (e.g. type: Zyklos or UEZ). Subsequently add the previously homogenously mixed resin and hardener components of the binder. Ensure that the liquid and solid components are evenly mixed. When preparing small quantities of lightweight screed (5 kg units ASODUR-LE binder, 25 kg special lightweight aggregate) place the special lightweight aggregate into a mixing bucket (capacity 60 litres) and add the previously mixed resin and hardener components. Subsequently blend the special lightweight aggregate and binder with a suitable stirrer at approx. 300 min^{-1} (e.g. drill with paddle). Ensure that the liquid and solid components are evenly mixed. Decant the material into a clean container and mix through thoroughly once again.

Method of application:
1. Priming:
   ASODUR-SG3-superfast (rapid setting primer for work in small areas) or ASODUR-SG3 (normal setting primer for work over large areas) is evenly applied to the substrate with a roller in a single application step, in order to improve the processability and adhesion capacity.
   Coverage:
   approx. 300 g/m² per application step.
2. The mixed lightweight screed is applied to the primed surface whilst still wet, and height-levelled with gauge rake.
3. Thoroughly compact the lightweight screed once applied and then smooth.

Important advice:
When ASODUR-LE is installed on impact sound deadening insulation, the following minimum thicknesses are necessary – irrespective of the compressibility of the insulation used:

Compressibility of the impact sound deadening insulation:	max. 1 mm	max. 3 mm
Min. layer thickness ASODUR-LE:	25 mm	30 mm

Where ceramic tiles are to be installed, follow DIN 18560-2!

- If ASODUR-LE is used as a thin load distribution layer on LEWIS dovetail sheeting, ensure that during installation the deflection of the LEWIS dovetail sheeting is avoided by using suitable load distribution such as e.g. shuttering boards. Make sure the lightweight screed is optimally compacted.
- When the screed is bonded at 15 mm, the tile size should not be greater than 40×40 cm. Larger formats would require installation to DIN 18560 part 2 i.e. a separating layer and a thickness of 25 mm ASODUR-LE.

- Ensure the installation site is ventilated and avoid direct sunlight.
- Do not add any additives to the screed.
- Higher temperatures shorten the application time. 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. Application work requires a substrate temperature of min. 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 period of time, the old surface must be well cleaned and thoroughly ground. Then perform a complete pore-free new application.
- After they have been applied, artificial resin 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 curing. Discoloured and/or sticky surfaces must be removed and reworked, e.g. through grinding or shot blasting.
- The indicated consumption quantities are calculated values without additions for surface roughness and absorbency, level compensation, and residual material in the container. We recommend a calculated safety addition of 10% on top of the calculated consumption quantities.
- 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.

GISCODE: RE 1