



Technical Data Sheet

ASODUR®-EK98-floor Joint Filler - Constructive Adhesive

Art.-No 2 05748

Properties:

ASODUR-EK98-floor is a solvent-free two component epoxy resin. In hardened condition it stands out for high hardness and high adhesive tensile-, pressure- and bending tensile strength. ASODUR-EK98-floor is resistant to the most acids, leaches, waters attacking concrete, detergents, seawater and brine. It is washable with water in green condition.

Areas of application:

ASODUR-EK98-floor is applied for the bonding of tiles on mortar, concrete, screed, plaster, old tiles and other grounds according to DIN 18157, Part 3. Furthermore it is used for the jointing of ceramic tile- and plate coatings and for the levelling of slight unplain parts on concrete- resp. screed- and plaster surfaces. ASODUR-EK98-floor is applied in breweries, dairies, laboratories, swimming pools, meat processing plants and other fields of the food- and chemical industry.

Technical Data:

Basis: Filled epoxy resin
 Colour: Middlegrey
 Special colour: old white, light grey
 further special colours on demand
 Viscosity: Filler consistency
 Density: 1.40 g/cm³ at + 23°C
 Compressive strength: (Din 1164,7) 51.9 N/mm²
 Bending tensile strength: (DIN 1164;7) 25.1 N/mm²
 E-modulus: (DIN 1048,5) 5,050 N/mm²
 Shear strength: 11.6 N/mm² (dry storage)
 (EN 12003)
 9.8 N/mm² (water storage)
 10.5 N/mm² (temp. change)
 Ratio of mixture: 100:6.8 weight parts
 Processing time: Approx. 60 min. at + 23°C
 Washable: In betw. 60 min. at + 23°C
 Minimum hardening temperature: + 10°C
 Accessible: After 16 hours at + 23°C

Lightly/fully loadable: After 48 hours/
 7 days at + 23°C
 Adhesive strength: Breakage of concrete
 Cleaning of tools: Whenever the work is interrupted, all tools have to be cleaned thoroughly with water.
 Delivery: ASODUR-EK98 is delivered in packages of 2 and 6 kg. Component A and component B are delivered in the corresponding mixture ratio.
 Storage: The shelf life for both components (A and B) at least is 18 months, if they are stored separately. In case of longer storage time the reaction might decrease. Store cool and dry.

Material Consumption:
 Adhesive: approx. 1.40 kg/m² and mm layer thickness.

Jointing:	Format size	Joint width	approx. consumpt.
Ceramic surfacing materials	in cm	in mm	kg/m ²
Tiles	24.0/11.5/1.5	8	2.25
	24.0/11.5/1.5	10	2.77
	24.0/11.5/2.0	8	3.00
	24.0/11.5/2.0	10	3.70
	24.0/11.5/2.5	8	3.75
	24.0/11.5/2.5	10	4.62
Middle mosaic	5.0/ 5.0/0.4	2	0.47
Stoneware	4.2/ 4.2/0.6	1.5	0.64
	10.0/10.0/0.9	3	0.81
	15.0/15.0/1.2	5	1.19
	24.5/12.0/0.8	5	0.74

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Surface preparation:

The ground has to be dry, able to bear load, fine gripping, free of grout, dust and loose parts, furthermore free of oil, fat and other spillings, which can act as separating agent.

If necessary, pre-treat the ground by sand-blasting, ball-blasting, scarfing, milling or rubbing down.

Product preparation:

The component A (resin) and component B (hardener) are being delivered in the corresponding mixture ratio. The component B (hardener) has to be poured completely into the component A. The mixing of the two components is effected with a mechanical stirrer at max. 300 Rpm (slowly running drilling machine with stirrer). Mix very thoroughly! It is essential to stir also from the sides and from the ground thoroughly, that the hardener also distributes in vertical direction. It has to be stirred, until the hardener is homogeneous. Do not work out of the delivered bucket! After the mixing fill the material into a separate, clean bowl and stir it thoroughly again. The temperature should be approx. +15°C.

Tile Fixing:

ASODUR-EK98-floor is applied roughly with a smoothing trowel, then it has to be ruled in proportionately with a tooth trowel. Afterwards the plates have to be applied by pushing- and pressing in according to DIN 18157, Part 3.

For exterior tiling and at high mechanical loadings a fixing free from hollow space is necessary.

Distance of the teeth:

50 mm egde length	3 mm
50 - 108 mm egde length	4 mm
109 - 200 mm egde length	4 mm
> 200 mm egde length	4 mm

Jointing of Tiles and Plates by Elutriation Procedure:

The mixed jointing mass ASODUR-EK98-floor is applied on the surface in stages and immediately afterwards brought into the clean, dry joints with an elutriation trowel or, on smaller surfaces, with joint filler. Afterwards

the excess material has to be removed from the tile surface with the elutriation trowel or elastic joint filler by ruling in diagonal direction.

Jointing With Pneumatic Pistols:

For the processing with pneumatic pistols ASODUR-EK98-floor is mixed in an extraction bucket. The filling of the cartridges is effected with a pressure plate. A compressor with an output of at least 10 bar and a suction power of approx. 100 l/min will be required.

Washing of the Tile Surface:

After the removal of the excess material with the elutriation trowel, the remaining joint material at the surface has to be emulsified with the least possible water.

According to the circumstance, a hard or very hard scouring fleece with fleece support is suitable for this purpose. After the emulsifying the grout is taken up with a soft sponge. Afterwards the tile surface has to be cleaned again with a clean, soft sponge. This cleaning should be performed only after the ASODUR-EK98-floor has lightly started to harden. Warm and stress relieved water makes the cleaning easier.

Remarks for the Revision of Faulty Resp. Washed Out Cement Joints:

- The joint depth has to be at least 3 mm.
- A flank adhesion of the tiles of the ASODUR-EK98-floor has to be assumed as a fact.
- Loose tiles can be bonded with ASODUR-EK98-floor.
- The joints must be dry, free of dust, and free of substances, which decrease the adhesion.

Health and safety:

ASODUR-EK98-floor is physiologically harmless after complete hardening. The hardener (component B) is caustic. Do not let touch the hardener with the skin. It is recommended to wear rubber gloves and goggles during the processing. Spots on the skin have to be cleaned immediately with plenty of soap and water,

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best under addition of 2% vinegar. If spots come into the eye, they have to be washed out with plenty of water. Afterwards wash with borated water filled into an eye wash bottle (available in medical supply shops), than immediately contact an eye specialist. In any case the general protective regulations of the vocational league have to be observed.

Important advice:

At low temperatures it is recommended to warm up the material before use in a cooking vat at approx. +50 °C and to let it cool down to ambient temperature afterwards. That way appearances of crystallization are being removed and the processing properties are recovered. Low object temperatures increase the consumption. The material loses its good plasticity, the reaction times increase. However, high temperatures shorten the processing time down. ASODURE-K98-floor is classified according to GefStoffV. Please regard the EC safety data sheet.

Chemical resistancy:

According to DIN 12808.

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No.	Tested liquid	Weight change 1) ΔW in %	Compressive strength change ΔS in %	Notes
1	Animal fat ²⁾	+ 0.06	- 2.56	
2	Vegetable fat ³⁾	+ 0.11	- 2.56	
3	Lactic acid, 5%	+ 0.22	- 0.38	
4	Citric acid, 10%	+ 0.09	- 1.28	
5	Hydrochloride, 3%	+ 0.15	- 1.28	
6	Sulfuric acid, 35%	+ 0.21	- 2.56	Brownish colouring
7	Potassium hydroxide, 20%	+ 0.59	- 7.69	
8	Iron(II) sulfate, 25%	+ 0.14	- 2.56	Yellow-brownish colouring
9	Iron(II) chloride, 30%	+ 0.14	- 7.69	Yellow-brownish colouring
10	Sodium hypochloride	- 0.18	- 3.85	White colouring
11	Brine	+ 0.11	- 6.41	
12	Premium fuel	+ 0.09	- 0.62	
13	Fuel oil	+ 0.06	- 1.28	

1) Average from three testings

2) Pork fat and beef tallow

3) Sunflower and rapeseed oil