



# BAYCOFLOOR-EP1240

## Oil and vapour barrier

### Properties:

BAYCOFLOOR-EP1240 is a low solvent, moisture compatible, two component epoxy resin with the following properties:

- due to its high density it displaces the water from the capillaries in the surface zone and functions as a barrier against capillary rising oils
- bonds very well to damp concrete substrates
- high Sd-value (< 300 m, water vapour proof)
- impermeable to Radon gas.

### Areas of application:

BAYCOFLOOR-EP1240 is used:

- as a special primer for oil contaminated, but previously cleaned concrete substrates
- as effective protection against the formation of osmosis bubbles with exposure to moisture from the rear
- as a primer for still damp concrete / bonded screed substrates

=> are to be treated with BAYCOFLOOR system coatings

=> are to be covered with conventional, classic floor finishes such as PVC, Linoleum, carpet, parquet, tiles etc. Please refer to the advice section.

### Technical Properties:

Basis:	2-comp. epoxy resin
Colour:	light grey
Viscosity:	approx. 70 seconds in a 4 mm
	DIN flowcup
Mixing ratio:	21,7 : 3,3 parts by weight
Density (Mixture):	approx. 1,87 g/cm <sup>3</sup>
Pot life:	approx. 60 mins. at +23°C approx. 30 mins. at +30°C
Application/	

Substrate temperature:	min. approx. +10°C,	max. approx. +35° C
Foot traffic after:	min. approx. 12 hours	at +23°C
Overcoat after:	approx. 12 - 24 hours at +23°C	
Fully cured:	after approx. 7 days at +23°C	
Min. cure temperature:	+8°C (slow cure)	
Shore 'D':	D/86/1 (ASTM D 2240:05)	
Compressive strength:	approx. 87,4 N/mm <sup>2</sup> (ASTM D 579:00)	
Adhesion strength:	2,5 N/mm <sup>2</sup> (ASTM D 4541:02)	
Flexural strength:	approx. 40,7 N/mm <sup>2</sup> (ASTM C 580)	
Abrasion resistance:	209 mg (ASTM D 4060:01)	
WDDW in µ*:	approx. 738,552 (DIN 16 726 free film)	
* Water vapour diffusion resistance		
** Full chemical resistance testing results available upon request		

### Surface preparation:

Concrete and cement-based screeds must be sound, clean, dry to damp and be free from materials that will impair adhesion. Completely remove weak or poorly bonded coats e.g. release agents, old adhesive, levelling compound residues or old surface finishes and paint residues.

BAYCOFLOOR-EP1240 can be used on the following substrates:

- Concrete slabs and cement-based screeds subjected to negative moisture pressure.
- Concrete slabs and cement-based screeds with increased residual moisture.

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**Note:**

Residual moisture in cementitious substrates, dry or damp \*

(\* "Guidelines for the protection and renovation of concrete structures" part 2, clause 1.2.5" concrete moisture.)

**"dry":**

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**"damp":**

The surface appears matt damp but may not exhibit 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.

**Oil contaminated concrete areas:**

- Clean with the cleaning agent BAYCO-EP OilCleanser in accordance with application instructions.  
Afterwards clean the surface with high pressure water jetting. Remove excess water with a suitable wet vacuum.
- Evenly apply BAYCOFLOOR-EP1240 on to the substrate whilst still damp with a brush and roller.

**Please observe:**

A closed film of water may not be present on the surface of the concrete. The substrate may not dry out – during drying there is a risk that due to continuously rising oil no bond between the primer and the substrate is achieved.

Dependent on the condition of the substrate to be treated suitable preparation methods should be used such as e.g. scabbling, shot blasting etc. The following minimum requirements are to be fulfilled dependent on the particular substrate:

- Concrete quality: min. C20/25
- Screed quality: min. EN 13813 CT-C25-F4
- Tensile adhesion strength: > 1,5 N/mm<sup>2</sup>
- Plaster quality: min. P IIIa / P IIIb
- Tensile adhesion strength: approx. 0,8 N/mm<sup>2</sup>

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".)

**Important advice:**

Oil contaminated substrates are particularly problematical. We recommend that you contact our Technical Services Department.

**Product preparation:**

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 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 striations); mixing time 3 minutes. The minimum temperature during mixing should be +15°C. **Do not use mixed material directly from the packaging.** Decant the material into a clean container and mix through thoroughly once again.

**Method of application / consumption:**

BAYCOFLOOR-EP1240 is applied to saturation on to the cleaned matt damp substrate with a rubber squeegee, brushed carefully into the surface with a priming brush and evenly rolled with a fur roller with short nap. Fully broadcast quartz sand into the fresh primer (grade: 0,5 – 1,0 or 0,7 – 1,2 mm diameter).

Once cured carefully remove all non-bound quartz sand before applying primers for further coatings.

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**Material consumption:** 0,4 – 0,6 kg/m<sup>2</sup> dependent on the substrate. The consumption of quartz sand is approx. 1,5 kg/m<sup>2</sup>. After a waiting time of approx. 12 to 24 hours any BAYCOFLOOR coating system, beginning with the appropriate primer, can be installed.

**Cleaning & Equipment Maintenance:**

Thoroughly clean tools immediately after use with a cleanser and thinners.

**Packaging:**

BAYCOFLOOR-EP1240 is available in 25 kg containers. Components A and B are delivered in a predetermined mixing ratio.

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**Important advice:**

- BAYCOFLOOR-EP1240 should not be applied as a waterproofing where preserving agents are used (propionic acid).
- The application temperature may not fall below +10°C nor exceed +40°C.
- Higher temperatures shorten the pot life. Lower temperatures increase the pot life and curing time. Material consumption is also increased at lower temperatures.
- To increase pot life/working time at higher temperature store material in a cool environment above +10°C and only expose to warm temperature shortly before mixing.
- Protect surface protective systems from moisture (e.g. rain, melt water) 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 abraded and renewed.
- High temperatures, direct sunlight and draughts can lead to the formation of a skin and impede the necessary granular binding as well as penetration into the substrate.
- When using BAYCOFLOOR-EP1240 as a vapour barrier beneath conventional floor finishes such as PVC, Linoleum, carpet and parquet, do not use a solvent based

**Storage & Shelf Life:**

24 months when stored dry and cool above +10°C in the original unopened packaging.

**Health and Safety:**

Once cured BAYCOFLOOR-EP1240 is considered harmless. The hardener (B) component is corrosive. Current relevant legislation should be followed at all times when working with epoxies, e.g. hazmat transportation, etc.

- adhesive. This leads to later bulging in the applied finish.
- Protect areas not to be treated from the effects of BAYCOFLOOR-EP1240.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from our Technical Services Department.
- Take heed of the technical data sheets for the products mentioned above before starting work.
- Cured product residues are to be disposed of under waste disposal classification 57123 "Epoxy resin".

Please observe a valid safety data sheet.