

Epoxy-System HP-E30VB

- Levelling Coating -



The Epoxy-System HP-E30VB is a coloured, solvent-free and filled two-component combination of resin and hardener with medium working time (pot life) suitable for high quality floor coatings.

Features:

- Self-levelling coating mass
- Very good adhesive properties, high abrasion-resistance (in combination with our primer HP-E80FS)
- High chemical and mechanical resistance
- High quality surface, easy to clean
- Free of solvents
- Coloured (grey, anthracite, green)
- Easy processing as „do it yourself“ system solution
- Packaging sizes: 5 kg or 25 kg in a bucket

Application:

- Applicable on cement bonded surfaces
- For filling and smoothing of damaged floor areas
- High quality surface finishing indoors and outdoors
- Renovation of damaged and rough floors in workshops, garages, feeding tables in livestock farming, slaughterhouses, floors within the livestock keeping etc.
- **Not** applicable on curved or flexible surfaces

Product Properties:

Mix ratio	100 parts resin / 17 parts hardener (by weight)		
Mixed viscosity	highly viscos		(self-levelling)
Pot life (working time)	30	min	(at 20°C)
Walkable after approx.	24	h	(at 20°C)
	48	h	(at 15°C)
Working temperature (recommended)	20 - 25 °C		
Working temperature (minimal)	15	°C	

Product specifications:

viscosity resin	Highly viscos	mPa * s	HP.07.0003
viscosity hardener	300 - 400	mPa * s	HP.07.0003

Consumption per surface-condition:

New floor	2,0	kg/m ²	
Rough floor	3,0	kg/m ²	
Very rough floor	≥ 5,0	kg/m ²	

Moulding material properties in cured condition:

Compression resistance	> 50	N/mm ²	PM.01.023
Density	ca. 1,6	g/cm ³	PM.01.002
Heat stability (Tg MAX)	50	°C	PM.01.011
Hardness	82 D	Shore	PM.01.009

Curing after 7d at 23°C.

Application instructions:

Pre-treatment of coating:

The levelling coating HP-E30VB can be applied on new and old surfaces. The surface should be dust-free, rough, clean and dry. Before coating, mechanical smoothen or sealed floors should be sanded or sandblasted. Missing or broken out areas in the surface should be filled by cement mortar or epoxy resin filler HP-E30S (affected areas should be primed with epoxy resin HP-E80FS). Afterwards, the primer HP-E80FS should be applied on the entire surface. The primer is an epoxy resin barrier layer preventing moisture and a bonding agent between mineral surface and subsequent coatings. About 10% of thinner HP-E80FS should be added to the primer system for optimal penetration into the pores.

Mixing:

The components resin and hardener will be delivered in total contents of resin and hardener designed to be used with one another. In respect of the safety instructions, the resin component should be mixed thoroughly with an electric stirrer at maximal 300 rpm before adding the resin component completely. Please stir both components thoroughly and intensively until a homogenous mixture is obtained. Ensure that the edges are well mixed. If you only use part of the combination of resin and hardener according to the characteristics given in the data sheet, please ensure that you use a suitable mixing container. Localized signs of hardening (streaks) indicate insufficient stirring and mixing of the components. Deviations from the mix ratio lead to an incomplete curing and therefore affect the product properties. Higher temperatures (> 20°C) will decrease the working time. If the mixture is subject to temperatures over 40°C, it should not further be processed.

Application:

After mixing both components of HP-E30VB thoroughly and intensively, pour the mass on the surface and spread it with a squeegee or a scratch spatula. Then vent the surface with the nobby roller HP-L1021 for minimizing air bubbles risen in the pores of the underground. This venting process should be repeated multiple times with a time delay between each process. If coating should be applied slip-resistant, fire-dried quartz sand can be applied between the first and second layer.

Note:

Due to aromatic molecule components, epoxy resin tends to yellowing colour if exposed to direct sunlight. This effect will be intensified by heat. To counteract this process, you can apply the transparent epoxy resin HP-E30TDS-0000 and UV stabilizer HP-BEL91.

Recommended tools for processing:

Nobby roller 24 cm (HP-L1021), telescopic rod (HP-L1024), tooth rake, drill with attachment for stirrer agitator

General information:

We recommend tests be performed for trials and suitability for the particular type of application. The system should only be used in the mentioned temperature conditions. The relative air humidity should not be above 70%. Protect the fresh coated surface from moisture. The coated surface is walkable after 24 hours (at 20 degrees and 70% relative air humidity; after 3 days mechanical and after 7 days chemical resistance properties are attained).

Higher temperatures will decrease this time. Improved heat resistance and better mechanical properties can be achieved by tempering (post-curing).

Cleaning work tools:

Unhardened product remains can be removed from tools by means of acetone or Thinner XB. Tools should be given a good airing after being cleaned with these solvents, in order to prevent the solvent from being retained until the tool is used again in a process. Hardened remains can only be removed by mechanical means.

Safety instructions:

The safety instructions are to be taken as being of greatest importance. Do not allow children to handle. Prevent inhalation of the fumes and contact with the bare skin. Wear approved protective gloves and goggles. If ingested do not eat, drink or smoke. During the hardening process, energy can be released in the form of heat, hence a cooling/heat exchanging should be provided in order to prevent hot spots. Only mix the components in the recommended proportions in accordance with the instructions.

Higher resistance against crystallization.

However, at very low temperatures, a crystallization of the hardener may occur. The process is reversible e.g. by heating it in a water bath to 40-60°C. A complete melting is important. Storage and processing with air admission may lead to carbamate formation (white coloration).

Storage:

Store in a cool and dry place. Threaded container tops should be kept free of material remains. Do not exchange tops/lids.

With optimal storage conditions, shelf-life should be beyond 12 months.

Deliverable quantities:

Resin in metal bucket and hardener in plastic bottles with safety fastening in several quantities. Larger containers can be obtained upon request.

- The delivered amounts always contain equal proportions of epoxy and hardener! -

Disposal:

Do not dispose of through the sewerage system, on areas of open water, or in the soil. Non-hardened remains of the product should be disposed of as hazardous waste. The hardened product waste should be treated as building rubbish or household rubbish.

Further information:

Further application information can be obtained from our website, by selecting Product Info on the homepage. Please do not hesitate to contact us by telephone if you have further queries.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so.

It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us. We recommend to perform preliminary tests and to check the suitability for the particular type of application

With the newest printing of this data sheet the previous version loose validity.