

Epoxy-System HP-E30RB

- Roller Coating -



The Epoxy-System HP-E30RB 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 and wall coatings.

Features:

- Spreadable and rollable coating mass for floor and wall coatings
- Very good adhesive properties, high abrasion-resistance (in combination with our primer HP-E80FS)
- If needed, anti-slip material can be added
- High chemical and mechanical resistance
- High quality surface, easy to clean
- Free of solvents, can be thinned with thinner HP-XB upon demand (maximum up to 5%)
- Coloured (grey, anthracite, green)
- Easy processing as „do it yourself“ system solution
- Free of substances of very high concerns (SVHC)
- Packaging sizes: 2 kg and 4 kg in a bucket

Application:

- Applicable on cement bonded surfaces
- For coatings of new and slightly porous surfaces
- High quality surface finishing for walls and floors indoors and outdoors
- Areas of application are floors in workshops, garages, feeding tables within livestock farming, slaughterhouses, milking stalls, floors within the livestock keeping etc.

Product Properties:

Mix Ratio	100 parts resin / 22 parts hardener <i>(by weight)</i>		
<i>Optional</i>	<i>plus 0 - 5 parts thinner (HP-XB) as spreading aid</i>		
Mixed viscosity	viscos		(self-levelling)
Pot life (working time)	30	min	(at 20°C)
Walkable after ca.	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	viscos	mPa * s	HP.07.0003
Viscosity hardener	300 - 400	mPa * s	HP.07.0003

Consumption:

Average consumption is between 0,4 - 0,6 kg/m² per layer. Consumption may be higher if concrete is porous or coarse. We recommend you to apply HP-E30RB in two layers. If coating should be applied slip-resistant, fire-dried quartz sand can be applied between the first and second layer.

Moulding material properties in cured condition:

Compression resistance	> 50	N/mm ²	PM.01.023
Density	ca. 1,5	g/cm ³	PM.01.002
Heat stability (Tg MAX)	50	°C	PM.01.011
Hardness	83 D	Shore	PM.01.009

Curing after 7d at 23°C.

Application instructions:

Pre-treatment of coating:

The roller applied coating HP-E30RB can be applied on new and slightly porous surfaces. The surface should be dust-free, rough, clean and dry. Before coating, mechanical smoothed or sealed floors should be sanded or sandblasted. Missing or broken out areas in the surface should be filled by suitable 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 using an electric stirrer at maximal 300 rpm before adding the resin component completely.

Please stir both components thoroughly and intensively including the outer rim until a homogenous mixture is obtained. If you only use part of the content of the combination (resin + 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 weighing resin and hardener (HP-E30RB) in and stirring thoroughly, please apply the mixture with a roller on the surface. At warmer temperatures we recommended you to pour out the entire bucket on the surface in order to achieve a user-friendly processing time. It is advisable to apply HP-E30RB in two layers.

If the coating should be slip-resistant, fire-dried quartz sand can be applied between the first and second layer. Optionally, up to 5% thinner (HP-XB) can be added for a better spreading.

Note:

Due to aromatic molecule components, epoxy resin tend 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:

Telescopic rod (HP-L1024), polyamide roller 25 cm (HP-L1026), polyamide roller 15 cm (HP-L1017), slip-on handles (HP-L1030), plastic bucket 14 lt. (HP-L1050), nobby roller 24 cm (HP-L1021), electric drill, stirrer agitator for electric drill.

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. Protect the fresh coated surface from moisture. The relative air humidity should not be above 70%. The coated surface is walkable after 24 hours (at 20 degrees and 70% relative air humidity; after 3 days mechanical and after 7days 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.