

Epoxy System HP-E30TDS

- Coating and laminating system -



The Epoxy-System HP-E30TDS is a two-component combination of resin and hardener with medium working time (pot life). It is versatile for high quality surface coatings.

Features & Benefits:

- sealing for wood, metal, several plastics (especially frp), screed and concrete
- very good adhesive properties, high abrasion-resistance
- very high chemical and mechanical resistance
- distinct osmosis protection
- free of solvents, can be thinned with HP-XB upon demand (maximum up to 5%)

Used as high quality surface coating in following areas:

- boatbuilding, (especially for osmosis protection in underwater areas)
- outdoor AND INDOOR swimming pools, water tanks, fish and aquaculture ponds
- roofs and rooftops
- balcony sealing
- agricultural and industrial coatings
- as surface for low temperature moulds (< 50°C)

Available in several colours or clear, adjustable with color paste HP-FP to RAL.

To increase color stability, we recommend the addition of our UV-Absorber HP-BEL91.

In order to achieve best results we recommend the use in combination with our primer / sealer (HP-E80FS) and / or laminating resin (HP-E30TLS).

Product Properties:

Mix Ratio coloured	100 parts resin / 53 parts hardener (by weight)
Mix Ratio clear	100 parts resin / 60 parts hardener (by weight)
Mixed Viscosity	thixotropic
Working Time (pot life)	30 minutes (at 20°C or 68°F)
Walkable	24 h (at 20°C or 68°F)
Walkable	48 h (at 15°C or 59°F)
Working Temperature (recommended)	20 - 25 °C (68 - 77°F)
Working Temperature (minimal, not below)	15 °C (59°F)
Full cure (strength) or refill with water	after 7 days at 20°C

Product Specifications:

Viscosity Resin	thixotroping		
Viscosity Hardener	300 - 400	mPa * s	DIN 16945

Data of Unreinforced Resin:

Tensile strength	40	N/mm ²	DIN 53455
Elongation	4	%	DIN 53455
Flexural strength	75	N/mm ²	DIN 53452
E-Modulus	2,75	kN/mm ²	DIN 53452
Temperature resistance (Tg _{MAX})	50	°C	HP04.08

Specifications after curing 7d at 23°C.

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 suitable protective gloves and safety goggles. When using 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).

Application Instructions:

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%. In respect of the safety instructions the epoxy and hardener should be mixed in a suitable mixing vessel in accordance with characteristics given in the data sheet. Deviating from the mixing recommendations can lead to incomplete hardening and through that loss of performance.

Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Localized signs of hardening indicate insufficient stirring and mixing of the components. Mixing of larger amounts (more than 100g) and higher temperatures (higher than 20°C) reduces the pot life time.

Note: If the temperature in the process goes above 40°C then it is not possible to continue further, as the process will lead to a loss of certain characteristics and properties. Increases in temperature can be reduced by pouring the mixture into flat painting trays. Hard substrata (like cured laminates) must be degreased, cleaned, grinded and cleaned again before coating with HP-E30TDS. In System configuration with HP-E80FS and / or HP-E30TLS can alternatively worked "wet-on-wet".

Generally for epoxy: Full cure (strength) after 7 days at 20°C (literature value). Higher temperatures will decrease this time. Improved heat resistance and better mechanical properties can be achieved by tempering.

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. Hardened remains can only be removed by mechanical means.

Storage:

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:

Plastic containers 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 tests be performed for trials and suitability for the particular type of application.

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