

### Epoxy System HP-E30TLS

- Coating and laminating system -



The Epoxy-System HP-E30TLS is an unfilled two-component combination of resin and hardener with medium working time (pot life). It is versatile for surface coating and laminating.

#### Features & Benefits:

- good wet-out of reinforcement fibres
- very good mechanical and chemical properties
- Universally suitable for pre-sealing or / and laminating of fibre reinforced surface coating in system configuration between primer (HP-E80FS) and topcoat (HP-E30TDS)
- Completely free of solvents, therefore
  - *direct working on PU- or PS/EPS foam is possible*
  - *suitable for indoor use (fish ponds, pools, tanks,...)*
  - *No odour pollution from solvents!*

Using for tough, high quality, fibre reinforced coatings in following:

- outdoor AND INDOOR swimming pools, water tanks, fish and aquaculture ponds
- roofs and rooftops
- balcony sealing
- agricultural and industrial coatings

For best results, we recommend a finish with a suitable epoxy-topcoat (e.g. HP-E30TDS)!

#### Product Properties:

Mix Ratio	100 parts resin : 60 parts hardener (by weight) 100 parts resin : 67 parts hardener (by volume)		
Mixed Viscosity	low viscous		
Working Time (pot life)	30 minutes	(at 20°C or 68°F)	
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)	
<b>Working Temperature (minimal, not below)</b>	<b>15 °C</b>	<b>(59°F)</b>	
Full cure (strength) or refill with water (Topcoat necessary!)	after 7 days at 20°C		

#### Product Specifications:

Viscosity Resin	600 - 900	mPa * s	DIN 16945
Viscosity Hardener	300 - 400	mPa * s	DIN 16945

#### Data of Unreinforced Resin:

Tensile strength	40	N/mm <sup>2</sup>	DIN 53455
Elongation	4	%	DIN 53455
Flexural strength	75	N/mm <sup>2</sup>	DIN 53452
E-Modulus	2,75	kN/mm <sup>2</sup>	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 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).

### 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 temperature can be reduced by pouring the mixture into flat painting trays.

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 (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.

### 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.*

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