Epoxy Resin HP-E28L

- Laminating Resin System -

The Epoxy Laminating Resin System HP-E28L is an unfilled, low-viscosity combination of resin and hardener with working time (pot life) about 30 minutes.

Features & Benefits:

- Excellent wet-out of fiberglass, carbon and aramid fibers
- Cold-hardening, demouldable at room-temperature
- Very good saturating
- Possible to add all our fillers
- Binding agent for fibrous materials and mouldings
- Construction of thin-film laminates

Product Properties:

Colouring	without colour (resin), light blue (hardener)	
Mix Ratio	100 parts resin : 40 parts hardener (by weight) 100 parts resin : 44 parts hardener (by volume)	
Mixed Viscosity	low viscous	(details below)
Working Time (pot life)	28 minutes	(at 20°C or 68°F)
Demouldable after	24 h	(at 20°C or 68°F)
Full Cure	7 days	(at 20°C or 68°F)
Working Temperature	15 - 23 °C	(64 – 77°F)

Product Specifications:

Viscosity Resin	600 - 900	cps	DIN 16945
Viscosity Hardener	200 - 300	cps	DIN 16945

Data of Unreinforced Resin:

Tensile strength	60 - 70	N/mm^2	DIN 53455
Elongantion	3 - 5	%	DIN 53455
Flexural strength	100 - 110	N/mm^2	DIN 53452
E-Modulus	3	kN/mm^2	DIN 53452

Specifications after curing 24h at 23°C (73°F) + 15h at 60°C (140°F)

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!

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.

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 optimum temperature conditions. The relative air humidity should not be above 70%.
In respect of the safety instructions the epoxy and hardener should 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℃) reduces the pot life time. Notably, if the temperature in the process go above 40℃ then it is not possible to continue further, as the process with lead to a loss of certain characteristics and properties. Temperature increases can be reduced by pouring the mixture into flat painting trays.
By the insertion of material layers these will be cut after the process and prepared accordingly with the separating agent provided, negative or positive forms rendered. After spreading the epoxy mixture over surface, the saturation and de-aeration with approved equipment (de-aeration roller, referred to “bubble buster” or “degasser roller”).
By the homogeneous action, all layers will be laminated “wet on wet”. The cohesiveness of the resulting form is dependent upon the number of layers. Improved heat resistance can be achieved by tempering at approximately 60℃ for 15 hours.

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 such as grinding tools.

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 the quantities 0.7, 1.4, 2.8, 7 and 42 kg.
- The delivered amounts always contain equal proportions of epoxy and hardener! -
Larger containers can be obtained upon request.

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 Internet site, by selecting Product Info on the homepage.
Please do not hesitate to contact us by telephone if you have further queries.