

# **TECHNICAL DATA SHEET**

# E25L

- Laminating Resin System -



The Epoxy Laminating Resin System E25L is an unfilled, low-viscous 2-components combination of resin and hardener with accelerated curing.

# **Properties and field of application:**

Very good wetting of reinforcing fibres Causes clear, non-gluey surfaces Cold-hardening, demouldable at room-temperature

Applicable as impregnating and laminating resin systems Binder for fibrous materials for moulding Creation of fine fabric laminates Surface sealing

## **Physical characteristics:**

Physical data / Raw condition:	Value	Unit	Test method
Viscosity Resin 25°C	700 - 1100	mPa * s	PM.01.003
Viscosity Hardener 25°C	600 - 800	mPa * s	PM.01.003

Physical Data / Hardened Condition:	Value	Unit	Test method
Tensile strength	45 - 55	N/mm <sup>2</sup>	PM.01.004
Elongation	3 - 4	%	PM.01.004
Flexural strength	80 – 85	N/mm <sup>2</sup>	PM.01.005
E-Modulus	2,5 - 3	kN/mm <sup>2</sup>	PM.01.005

Physical data determined on the unfilled specimen. Specifications after curing 7d at 20°C.

## Instructions for use:

Processing data:	
Mix ratio (by weight)	100 parts resin : 60 parts hardener (by weight)
Mix ratio (by volume)	100 parts resin : 66 parts hardener (by volume)
Mixed viscosity	low viscous
Pot Life (working time) 20°C	25 min (100g)
Demouldable after	24 h (20°C)
Full cure	7 d (20°C)
Working Temperature (optimal)	15 °C – 25 °C (hardening up to 5°C)







# **Safety Instructions:**

The safety instructions are to be taken from the respective containers. Do not allow children to handle. Prevent inhalation of fumes and contact with bare skin. Wear suitable protective gloves and safety goggles. Do not eat, drink or smoke while using. 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 to perform preliminary tests to check the 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%. The surface to be treated must be clean and dust-free. In respect of the safety instructions, the epoxy resin 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 to a loss of performance. Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Localized signs of smear formation indicate insufficient stirring and mixing of the components. Mixing larger amounts (more than 100g) at higher temperatures (higher than 20°C) reduces the pot life. Mixtures which rise above 40°C in the mixing vessel should not be used any further since curing would lead to property losses. Temperature increases can be reduced by pouring the mixture into flat paint trays.

When using fabric layers, these are cut to size as required and placed in a prepared negative mould provided with release agent or placed on a positive mould. After spreading the epoxy mixture, the impregnation and venting is carried out with a suitable device. For homogenous bonding, all layers are laminated "wet on wet". The strength of the end body depends on the number of fabric layers. Increased heat resistance can be achieved by tempering at e.g. 60°C for 15 h.

#### **Cleaning of work tools:**

Unhardened product remains can be removed from tools by means of acetone. Tools should be given a good airing after being cleaned with this solvent, in order to prevent the solvent from being retained until the tool is used again.

Hardened remains can only be removed by mechanical means, e.g. by sanding.

#### Storage:

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

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

#### **Disposal:**

Do not allow to enter drains, waterways or soil. Uncured product residues are hazardous waste. The cured system is construction site waste / household waste.

#### **Further Information:**

Further information can be obtained from our website, by selecting Product Info. 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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