

Basis	<b>Laminating resin tested according to DIN 5510-2</b>
Resin	<b>LH 25</b>
Hardener	<b>LH 25</b>
Colour	white

### Applications

- Laminate parts for rail vehicles
- Boatbuilding

### Properties

- flammability classification S 4
- smoke emission class SR-2
- drippability class ST-2
- dimensionally accurate
- test of toxicity of smoke gases - Annex C

### Processing data

Product		Mixture LH 25 / Resin+Hardener	Resin LH 25	Hardener LH 25
Colour		white	white	yellow
<b>Mixing ratio</b>	<b>p. b. w.</b>		<b>100</b>	<b>15</b>
Viscosity at 25°C	mPas	950 ± 100	3750 ± 750	10 ± 5
Density at 20°C	g / cm <sup>3</sup>	1,30 ± 0,02	1,36 ± 0,02	0,91 ± 0,01
Pot life 200 g / 20°C	min.	50 - 60	-	-
Curing time at RT	hrs.	16 - 24	-	-
Post curing	Time in h/ Temperature in °C	12 - 16 / 80	-	-

### Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	86 ± 8
Flexural elongation at break	EN ISO 178	%	2,2 ± 0,1
Flexural modulus	EN ISO 178	MPa	4600 ± 450
Flexural elongation at break	ISO 37	%	-
Impact resistance (Charpy)	EN ISO 179	kJ/m <sup>2</sup>	8 ± 1,5
Compressive strength	EN ISO 604	MPa	110 ± 10
Heat resistance (HDT)	DIN EN ISO 75 B	°C	90 ± 3
TG in TMA T <sub>g</sub>	Methode TMA	°C	approx. 89
Shore hardness	DIN ISO 7619-1	Shore D	88 ± 3
coefficient of thermal expansion	internal test / Dilatometer	10 <sup>-6</sup> K <sup>-1</sup>	-
Linear shrinkage	internal	%	-

### Sales units (packages)

Units	Resin	LH 25	20,000 kg
	Hardener	LH 25	5,000 kg

## Processing instructions

Material and processing temperature between 18 - 25°C.

Intensive mixing of resin and hardener at room temperature, if possible without any bubbles.

Stir up thoroughly before use. Mixing ratio according to instructions to get a homogeneous consistency .

To remove any brittleness and to get best possible mechanical and thermal properties after curing a postcuring of 12-16 hrs. at 80°C is necessary. At postcuring of 24 hrs. at 60°C you achieve temperature resistance of 78°C according to ISO 75 B and 90 % of mechanical properties.

To avoid deformations, postcuring should be made in the mould or on an adequate supporting

We recommend a post curing with a temperature rise of about 10°C/hour. Difficult geometries should be supported during the curing cycle. Afterwards the part should be cooled down at about 20°C/hour.

## In General

**ebalta** LH 25 is a light-filled two-components epoxy resin, meeting the requirements of flammability classification S4, smoke emission classification SR-2, drooling classification ST-2 as well as test of toxicity of smoke gases of material and assembly parts of trail vehicles, according to DIN 5510-2.

Regarding dimensional accuracy and –stability, laminates made of **ebalta** LH 25, even come up to great demands.

As gelcoat LH 2 Thix is used with SR hardener.

Mixing ratio LH 25-Thix/SR: 100:15, potlife: about 20 min.

For bigger parts we recommend the slower system LH 25/L.

## Storing

At appropriate storage 18-25°C.

Occuring crystallization due to disadvantageous storage conditions can be made return by warming up the material at approx. 60° C for some hours.

Opened containers should be closed immediately after use and be protected against moisture. This material should be used up as soon as possible.

Shelf life is indicated on the labels

## Safety measure

Please follow the precaution instructions of the Government Safety Organisation of the chemical industry when working with this material. Please follow safety advices !

## Waste Disposal

According to arrangement with local authorities cured material can be disposed as domestic or commercial waste.

Non-cured products are waste which is subject to inspection and has to be disposed accordingly.

In case of further questions please do not hesitate to contact our Department for Product Safety.

The instructions and recommendations are given in good faith and are based on long experience and careful tests. Since the conditions of use are beyond our control, and due to versatility of applications and working methods, we can't give any guarantee. All information are non-binding and are no guarantee for special characteristics or properties of the product. Despite information given from **ebalta** the customer has to make his own tests regarding applications and processing. If any special warranty is requested, written agreement on this subject is essential.