

|                   |   |
|-------------------|---|
| Basis             | Laminating resin tested according to DIN 5510-2 |
| Resin             | LH 25   |
| Hardener          | LH 25   |
| Colour            | white   |
| Further hardeners | LH 25 S / LH 25 L                               |

## Applications

- Laminate parts for rail vehicles
- Boatbuilding

## Properties

- flammability classification s 4
- smoke emission class SR-2
- tear drops class ST-2
- dimensionally accurate

## Processing data

| Product               |                                 | Mixture<br>LH 25 / Resin+Hardener | Resin<br>LH 25 | Hardener<br>LH 25 |
|-----------------------|---------------------------------|-----------------------------------|----------------|-------------------|
| Colour                |                                 | white                             | white          | yellow clear      |
| <b>Mixing ratio</b>   | <b>p. b. w.</b>                 |                                   | <b>100</b>     | <b>15</b>         |
| Viscosity at 25°C     | mPas                            | 950 ± 100                         | 5500 ± 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/<br>Temperature in °C | 12 - 16 / 80                      | -              | -                 |

## Physical data

| Properties                    | Inspect. requirem. | Unit              | Value      |
|-------------------------------|--------------------|-------------------|------------|
| Flexural strength             | EN ISO 178         | MPa               | 86 ± 8     |
| Flexural modulus              | EN ISO 178         | MPa               | 4600 ± 450 |
| Flexural strength at breakage | EN ISO 178         | %                 | 2,2 ± 0,1  |
| Compressive strength          | EN ISO 604         | MPa               | 110 ± 10   |
| Impact resistance (Charpy)    | EN ISO 179         | kJ/m <sup>2</sup> | 8 ± 1,5    |
| Heat resistance (Martens)     | DIN 53458          | °C                | 82 ± 3     |
| TG in TMA T <sub>g</sub>      | Methode TMA        | °C                | 89         |
| Shore hardness                | DIN 53505          | Shore D           | 88 ± 3     |

## Sales units (packages)

|       |          |       |                                   |
|-------|----------|-------|-----------------------------------|
| Units | Resin    | LH 25 | 6,000 kg / 20,000 kg / 220,000 kg |
|       | Hardener | LH 25 | 5,000 kg / 50,000 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.

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

## 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 as well as drooling classification ST-2 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 smaller parts or shorter production shifts, LH 25 can be used with hardener LH 25/S.

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

## Storing

At appropriate storage (18-25°C) in closed original container 12 months. Occuring crystallization due to disadvantageous storage conditions can be made return by warming up the material at approx. 60° C.

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

## 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.

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