

Basis	<b>Laminating resin</b>
Resin	<b>AH 120</b>
Hardener	<b>GL</b>
Colour	whitish transparent
Further hardeners	<b>TG / TGL / TGS / TL-1</b>

## Applications

- Laminating resin for fabrics
- Vehicle construction
- Aircraft construction

## Properties

- unfilled
- high strength
- low exotherm

## Processing data

Product		Mixture AH 120 / GL	Resin AH 120	Hardener GL
Colour		whitish transparent	opaque	yellow clear
<b>Mixing ratio</b>	<b>p. b. w.</b>		<b>100</b>	<b>32</b>
Viscosity at 25°C	mPas	930 ± 100	850 ± 100	750 ± 150
Density at 20°C	g / cm <sup>3</sup>	1,11 ± 0,02	1,15 ± 0,03	1,00 ± 0,02
Pot life 200 g / 20°C	min.	40 - 45	-	-
Curing time at RT	hrs.	12 - 16	-	-
Post curing	Time in h/ Temperature in °C	-	-	-

## Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	110 ± 10
Flexural elongation at break	EN ISO 178	%	5,50 ± 0,2
Flexural modulus	EN ISO 178	MPa	3250 ± 250
Flexural elongation at break	ISO 37	%	-
Impact resistance (Charpy)	EN ISO 179	kJ/m <sup>2</sup>	48 ± 5
Compressive strength	EN ISO 604	MPa	100 ± 10
Shore hardness	DIN ISO 7619-1	Shore D	84 ± 2
Heat resistance (HDT)	DIN EN ISO 75 B	°C	63 ± 2
Coefficient of thermal expansion	internal test / Dilatometer	10 <sup>-6</sup> K <sup>-1</sup>	-
Linear shrinkage	internal	%	-

## Sales units (packages)

Units	Resin	AH 120	5,000 kg / 10,000 kg / 25,000 kg / 50,000 kg / 220,000 kg
	Hardener	GL	1,2 kg / 5 kg / 15 kg / 50 Kg

## Processing instructions

The material and processing temperature should be between 18 and 25 °C.

The resin and hardener should be mixed intensively and as free of bubbles as possible at room temperature.

A heating rate of approx. 5 - 10 °C/hour is optimal. For difficult geometries, the use of a support mould is recommended.

The cooling rate should ideally be approx. 20 °C /hour.

## In General

**ebalta** AH 120 is a very low viscosity unfilled epoxy resin with high strength values and high dimensional stability. With appropriate hardeners even at elevated temperatures.

**ebalta** AH 120/GL is suitable as laminating resin for large area and thick laminates. Hardener GL is almost odourless.

With a mixing ratio of 100:39, a heat treatment of 16 hours at 80°C results in a glass transition temperature that is approx. 15°C higher, slightly stiffer laminates and better impact strength.

The laminate thickness should then not exceed 6-7 mm.

## Storing

In temperature-controlled rooms at 18 - 25°C

Crystallisation occurring under unfavourable storage conditions can be reversed by heating to approx. 60 °C for some hours.

Always reseal opened containers immediately in a moisture-proof manner and use as soon as possible.

Please refer to the product labels for the shelf life of the material.

## Safety measure

When processing this product, the protective measures recommended by the Employers' Liability Insurance Association of the Chemical Industry should be observed. Follow safety advice.

## Waste Disposal

The cured materials can be disposed of as domestic or industrial waste after consultation with the relevant authorities.

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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.