

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

### Applications

- Laminating resin for fabrics
- Vehicle construction
- Aircraft construction

### Properties

- unfilled
- low viscosity
- high strength
- low exothermic character

### Processing data

Product		Mixture AH 120 / GL	Resin AH 120	Hardener GL
Colour		whitish transparent	milky filmy	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
Heat resistance (HDT)	DIN EN ISO 75 B	°C	63 ± 2
Shore hardness	DIN ISO 7619-1	Shore D	84 ± 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 temperature of material and processing should be between 18 and 25° C.

The mixing of resin and hardener should be made intensively and if possible without any bubbles at room temperature.

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** 120/GL is a very low-viscous two-component epoxy resin with high strength values and fast curing. Due to its good soaking and wetting characteristics, this resin/hardener mixture is most suitable for solid parts with fabrics made of glass or carbon fibres.

AH 120/GL is suitable as laminating resin for both large area- and thick laminates.  
Due to its almost odourless and skin-friendly GL hardener it is most suitable as laminating resin.

With a mixing ratio of 100:40 you reach an about 15°C higher TG, slightly stiffer laminates as well as better impact resistance.  
The laminate thickness should not exceed 6-7 mm.

## 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.