

Basis	<b>High strength general purpose resin</b>
Resin	<b>AH 110</b>
Hardener	<b>GL</b>
Colour	yellowish transparent
Further hardeners	<b>TL-1 / TGL / TGS / GLD / TG / D / SR</b>

### Applications

- Laminating resin for fabrics
- Bonding resin for fillers

### Properties

- unfilled
- high strength
- nearly odourless

### Processing data

Product		Mixture AH 110 / GL	Resin AH 110	Hardener GL
Colour		yellowish transparent	yellowish transparent	yellow clear
<b>Mixing ratio</b>	<b>p. b. w.</b>		<b>100</b>	<b>32</b>
Viscosity at 25°C	mPas	1450 ± 150	2000 ± 300	750 ± 150
Density at 20°C	g / cm <sup>3</sup>	1,13 ± 0,02	1,17 ± 0,02	1,00 ± 0,02
Pot life 200 g / 20°C	min.	40 - 50	-	-
Curing time at RT	hrs.	12 - 14	-	-
Post curing	Time in h/ Temperature in °C	-	-	-

### Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	135 ± 10
Flexural elongation at break	EN ISO 178	%	6,0 ± 0,5
Flexural modulus	EN ISO 178	MPa	3500 ± 300
Flexural elongation at break	ISO 37	%	-
Impact resistance (Charpy)	EN ISO 179	kJ/m <sup>2</sup>	25 ± 10
Compressive strength	EN ISO 604	MPa	105 ± 10
Shore hardness	DIN ISO 7619-1	Shore D	84 ± 3
Heat resistance (HDT)	DIN EN ISO 75 B	°C	75 ± 3
Glass transition temperature T <sub>g</sub>	DSC	°C	-
Coefficient of thermal expansion	internal test / Dilatometer	10 <sup>-6</sup> K <sup>-1</sup>	-
Linear shrinkage	internal	%	-

### Sales units (packages)

Units	Resin	AH 110	5,000 kg / 10,000 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 5 - 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

AH 110/GL is an epoxy resin with high strength even on elevated temperatures. It can be used as a casting resin with powdery fillers like aluminium powder, as a laminating resin with fibre glass cloth and as a bonding resin for granular fillers like aluminium granules. Depending on the application you can choose from a variety of hardeners.

AH 100/GL is suitable as laminating resin for large area parts and thick laminates. Due to its almost odourless skin friendly hardener GL, this mixture is especially applicable as laminating resin.

With a mixing ratio of 100:39 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: see 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.