Technical Datasheet

AH 100 / TGS

Basis	**Universal general purpose resin**
Resin	**AH 100**
Hardener	**TGS**
Colour	yellowish transparent
Further hardeners	**D / GL / TG / TGL**

Applications

- Thin-walled laminates
- Low volume backfillings
- Bonding resin for fillers

Properties

- unfilled
- fast curing

Processing data

Product		**Mixture AH 100 / TGS**	**Resin AH 100**	**Hardener TGS**
Colour		yellowish transparent	yellowish transparent	yellowish transparent
Mixing ratio	**p. b. w.**		**100**	**20**
Viscosity at 25°C	mPas	750 ± 100	900 ± 150	320 ± 75
Density at 20°C	g / cm^3	1,12 ± 0,02	1,15 ± 0,02	0,96 ± 0,02
Pot life 200 g / 20°C	min.	25 - 35	-	-
Curing time at RT	hrs.	8 - 10	-	-
Post curing	Time in h/ Temperature in °C	-	-	-

Physical data

Properties	**Inspect. requirem.**	**Unit**	**Value**
Flexural strength	EN ISO 178	MPa	100 ± 5
Flexural elongation at break	EN ISO 178	%	6,7 ± 0,5
Flexural modulus	EN ISO 178	MPa	2800 ± 200
Flexural elongation at break	ISO 37	%	-
Impact resistance (Charpy)	EN ISO 179	kJ/m^2	34 ± 8
Compressive strength	EN ISO 604	MPa	75 ± 5
Shore hardness	DIN ISO 7619-1	Shore D	82 ± 3
Heat resistance (HDT)	DIN EN ISO 75 B	°C	76 ± 3
Coefficient of thermal expansion	internal test / Dilatometer	$10^{-6}K^{-1}$	-
Linear shrinkage	internal	%	-

Sales units (packages)

Units	Resin	AH 100	5,000 kg / 10,000 kg / 25,000 kg / 50,000 kg / 220,000 kg
	Hardener	TGS	1,000 kg / 2,000 Kg / 5,000 kg / 50,000 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

ebalta AH 100 is a very thin, unfilled epoxy resin, which can be used with different hardeners. Depending on the application the suitable hardener can be mixed with the resin AH 100.

The fast hardener TGS is used for thin laminates and small-volume back fillings.

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.