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
- Small volume backfillings
- Binding 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 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 100 is an unfilled, very low viscosity epoxy resin. Depending on the intended use, different hardeners can be used.
The fast hardener TGS is used for the production of thin laminates and small-volume backfillings.

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