

Basis	temperature resistant laminating resin
Resin	AH 140
Hardener	TCS
Colour	bluish transparent
Further hardeners	TC

Applications

- Laminates for automotive industry
- Laminates for aeronautic
- Laminates for boatbuilding

Properties

- unfilled
- good curing at room temperature
- high heat resistance
- low viscosity
- high strength
- excellent wet-out characteristics

Processing data

Product		Mixture AH 140 / TCS	Resin AH 140	Hardener TCS
Colour		bluish transparent	yellow transparent	bluish transparent
Mixing ratio	p. b. w.		100	30
Viscosity at 25°C	mPas	600 ± 75	1000 ± 200	55 ± 5
Density at 20°C	g / cm ³	1,10 ± 0,02	1,17 ± 0,02	0,93 ± 0,02
Pot life 200 g / 20°C	min.	55 - 65	-	-
Curing time at RT	hrs.	22 - 26	-	-
Post curing	Time in h/ Temperature in °C	4 - 6 / 60 5 - 6 / 80	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	120 ± 10
Flexural modulus	EN ISO 178	MPa	2900 ± 300
Flexural strength at breakage	EN ISO 178	%	7,5 ± 0,4
Compressive strength	EN ISO 604	MPa	85 ± 8
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	50 ± 8
Heat resistance (Martens)	DIN 53458	°C	100 ± 3
Glass transition temperature TG	methode DSC	°C	ca. 114
Shore hardness	DIN 53505	Shore D	86 ± 3

Sales units (packages)

Units	Resin hardener	AH 140 TCS	5,000 kg / 10,000 kg / 25,000 kg / 50,000 kg / 220,000 kg 1,500 kg / 5,000 kg / 50,000 kg
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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.

Additional details for post curing:

Typical curing

- a) Laminates 2 - 5 mm
 - 24 h at RT
 - 2 - 4 h at 40°C
 - 4 h at 60°C
 - 5 h at 80°C

- b) Laminates 5 - 10 mm
 - 24 h at RT
 - 4 - 6 h at 60°C
 - 5 - 6 h at 80°C

In General

Intermediate layer bonding after 24 hrs. at room temperature.

Storing

At appropriate storage (18-25°C) in closed original container 12 months. Occuring crystallization due to disadvantageous storage conditions can be made return by warming up the material at approx. 60° C.

Already opened containers should be closed immediately after use and be protected against moisture. This material should be used as soon as possible.

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.

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