

Basis	Epoxy board
Colour	light blue

Applications

- Prepreg tooling
- Master models for prepreg tools
- Moulds and tools for composites
- Vacuum forming tools

Properties

- very low coefficient of thermal expansion
- very high heat resistance
- very fine surface structure
- very good dimension stability
- low generation of dust during machining

Processing data

Product	ebaboard EP 138		
Colour	light blue		
Density at 20°C	g / cm ³	0,68 ± 0,02	

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	36 ± 4
Flexural modulus	EN ISO 178	MPa	2100 ± 100
Tensile strength	EN ISO 527-1	MPa	27 ± 4
Tensile modulus	EN ISO 527-1	MPa	2330 ± 100
Impact resistance (Charpy)	EN ISO 179	kJ/m ²	2,75 ± 0,25
Compressive strength	EN ISO 604	MPa	53 ± 4
Shore hardness	DIN ISO 7619-1	Shore D	69 ± 3
Heat resistance (HDT)	DIN EN ISO 75 B	°C	145 ± 3
Glass transition temperature T _g	DSC	°C	138
Coefficient of thermal expansion	internal test / Dilatometer	10 ⁻⁶ K ⁻¹	approx. 36

Sales units (packages)

ebaboard EP 138	1524 x 609 x 50 mm
	1524 x 609 x 75 mm
	1524 x 609 x 100 mm
	1524 x 609 x 150 mm

Processing instructions

Advice for machining of board material

- Making even of milling support
- Roughing of geometry
- Remove clamps, if possible allow to relax over night
- Clamping
- Finishing

Bonding: Adhesive 552 for epoxy boards, Mixing Ratio 100 : 14 p. b. w.

Mix not more than 1000 g resin with 140 g hardener. The material should be processed within 10 minutes. Apply 250-300 g of Adhesive 552 with a notched spatula (teeth A2) on both panel sides which have to be glued together. For gluing two boards together thus you need 500-600 g of Adhesive 552.

Sealing: Sealer 02 or Sealer 09

Release: Release Agent 17

After gluing the blocks they should be kept at room temperature for 12-16 hours. To cure the adhesive gently heat up the glued blocks at about 5 °C/ hour and keep them at 80 °C for 10 hours at least.

For higher temperature processing give a higher heat treatment accordingly. Keep the block one more hour at the highest temperature for every 100 mm thickness. If cured at 140 °C Adhesive 552 reaches a HDT around 145°C.

After cooling down at a rate of 5 °C/ hour the block should remain in the autoclave with closed doors or until the block-up reaches room temperature in the core.

Use the same procedure for curing prepregs on the mould. When taking the block out of the autoclave don't lay it on a cold surface. An isolating layer should be placed in between. Depending on the geometry of the tool different parameters may be necessary.

In General

ebaboard material is available in specified sizes. The surface is machined on all sides. **ebaboard** is a synthetic, post-cured board material on epoxy base. It has an even structure and plane parallel machined surfaces.

Advantages:

- Dense structure
- Good edge strength
- Low tension
- Good workability
- Low dust development when milling

Dimension tolerances of 3 mm in length and width and 0,5 mm in thickness are possible.

Safety measure

ebaboard material is a cured filled polyaddition product, no hazardous dusts when grinding.

According to regulations for hazardous goods **ebaboard** products don't have to be marked during transport and storage.

Please follow safety advices !

Waste Disposal

Small quantities can be disposed as domestic waste. For big quantities, contact your local authorities, please.

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.