

Basis **Adhesive 551**
Resin **Adhesive 551**
Hardener **Adhesive 551**

Colour yellowish transparent

Applications

- Bonding of epoxy boards

Properties

- very high heat resistance
- fast curing

Processing data

Product		Mixture Adhesive 551	Resin Adhesive 551	Hardener Adhesive 551
Colour		yellowish transparent	yellowish transparent	yellowish transparent
Mixing ratio	p. b. w.		100	14
Viscosity at 25°C	mPas	1800 ± 200	3800 ± 350	70 ± 15
Density at 20°C	g / cm ³	1,13 ± 0,03	1,15 ± 0,03	0,99 ± 0,03
Pot life 150 g / 20°C	min	30 - 35	-	-
Curing time at RT	hrs.	16	-	-

Physical data

Properties	Inspect. requirem.	Unit	Value
Flexural strength	EN ISO 178	MPa	115 ± 15
Flexural modulus	EN ISO 178	MPa	3275 ± 325
Tensile strength	EN ISO 527-1	MPa	85 ± 10
Tensile modulus	EN ISO 527-1	MPa	3215 ± 300
Elongation of tensile strength	EN ISO 527-1	%	3,7 ± 0,2
Compressive strength	EN ISO 604	MPa	125 ± 15
Heat resistance (HDT)	DIN EN ISO 75 B	°C	152 ± 5
Glass transition temperature TG	method DSC	°C	ca. 154
Shore hardness	DIN ISO 7619-1	Shore D	88 ± 3

Sales units (packages)

Units	Resin	Adhesive 551	0,877 kg / 4,386 kg
	Hardener	Adhesive 551	0,123 kg / 0,614 kg

Processing instructions

Mix not more than 1000 g resin with 140 g hardener, Mixing ratio is 100:14. The material should be processed within 10 minutes. Apply 250-300 g of Adhesive 551 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 551.

After gluing the blocks have to 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 least 80 °C for 10 hours.

For higher processing temperatures accordingly give a higher heat treatment. Keep the block one more hour at the highest temperature for every 100 mm thickness.

After a heat treatment of

8 hours at 80°C you get a heat resistance of 108°C HDT B

8 hours at 100°C 123°C HDT B

8 hours at 120°C 141°C HDT B

8 Hours at 140°C 150°C HDT B"

After cooling down at a rate of 5°C/ hour the block should remain at the autoclave with closed doors overnight, till he reaches room temperature also in the core.

Take 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 may be placed in between. Depending on the geometry of the tool different parameters may be necessary.

In General

For mixing and application of the material, clean and dry tools are essential. Mix according to mixing ratio, please also see front label of the cans.

Mix carefully and apply immediately. Material temperature when mixing not below 15°C.

Storing

Storage at room temperature 18-25 °C.

Already opened containers should be closed immediately after use and should be used as soon as possible.

Information about the expiration date you find on the sales packages.

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.