



Technical data

Epoxy Resin HT 2

Highly transparent laminating resin

Description

- **Highly transparent, almost water-clear**
- **High degree of UV stability**
- **Tack-free curing even of thin layers**
- **Free of nonylphenol**



Epoxy resin HT 2 is a highly transparent laminating resin of very low viscosity based on bisphenol A/F. The bisphenol F component reduces the viscosity and prevents the resin from forming crystals at low storage temperatures (less than + 5 °C).

Epoxy resin HT 2 is diluted with a difunctional reactive compound and is free of solvents and fillers.

The system is highly transparent and yields in conjunction with finished glass fabrics (Interglas) highly transparent laminates with good light fastness.

Owing to its low surface tension the system exhibits good filler absorption properties. And it has excellent wetting properties with respect to reinforcing fibres of glass, aramid, and carbon.

Application

Highly transparent, water-resistant laminates, above all for surfboards, snowboards, boat linings, aquarium accessories, light domes, solar cell coatings, floor finishes.

The resin is suitable for all processing methods, e.g. hand lay-up operations, winding, and press moulding (also in vacuum).

Metal, wood, plastics, ceramics, etc., can be joined with high-strength bonds without the application of contact pressure. Curing takes place virtually free of shrinkage.

Hardener

The optimal light fastness is provided by the Hardener HT 2. This is a cycloaliphatic amine that is used at room temperature. As with all cold-curing epoxy resin systems, it is also possible to apply additional hot curing at 50 °C for ten hours to enhance the mechanical and thermal properties.

Hardener HT 2

Description

- Hardener for Epoxy Resin HT 2
- Processing time: 45 minutes
- Free of nonylphenol
- Cold curing



General data of Epoxy Resin HT 2	Unit	Epoxy Resin HT 2	Hardener HT 2
Processing time 100 g - mixture	minutes /20 °C	45	
Mixing ratio at 100 parts by weight Epoxy Resin HT 2	weight (g)	100	48
Curing time (Laminate 1mm)	hours/20 °C	24	
Heat resistance of components	°C (approx.)	60	
Delivery state	-	liquid	
Colour	-	almost water-clear	
Density	g/cm ³ /20 °C	1.14	1.0
Viscosity	mPa*s/25 °C	400	200
Epoxy value	100/equivalent	0.6	-
Amine equivalent (mean)	g/equivalent	-	80
Refractive index	n _D 25	1.543	1.520
Flashpoint DIN 51584	°C	>120	
Storage (sealed, at 15 °C)	months	36	

Data of the unreinforced cured resin (cured 6 days at RT)	Unit	Specifications
Flexural strength	MPa	100
Tensile strength	MPa	71
Impact strength	kJ/m ²	27
Tensile modulus	MPa	3.0 · 10 ³
Glass transition temperature T _g	°C	60

Edition 08/2019, subject to change

All information, recommendations, and advice on the part of R&G Faserverbundwerkstoffe GmbH are published to the best of our knowledge and belief. They are noncommittal and contain neither explicit nor tacit assurance or warranty of particular properties. The values specified for properties are typical figures. Recommendations or advice serve to describe our products and possible applications in a general or exemplary, but not specifically individual manner. In the course of the constant technical advancement and improvement of our products there may be changes to the characteristic values, copy, and diagrams; no specific reference is made to any such change. Owing to our products' wide and highly diverse range of potential applications far beyond any of our attempts to analyse, the customer alone is responsible for examining our products' suitability for the respective processes and purposes and their respective processibility. All and any protective rights and the applicable laws, terms, and conditions must be observed by the buyer or user of our products at their own responsibility. Publication is not a licence and does not intend the violation of any patents.