

Duroglass®1025

Laminating resin for high-performance GFK (glass fibre reinforced plastic) with excellent chemical resistance.

Duroglass®1025 is a special epoxy-acrylate optimised for laminates, with reduced monomer content and low viscosity.

Due to the excellent chemical resistance Duroglass® is suitable for extreme industrial surroundings.

Duroglass®1025 is optimised for maximum thermal and also chemical resistance. Duroglass®1025 is suitable for use in contact with solvents, acids and oxidising substances.

Glass and carbon fibre laminates made of Duroglass® are characterised by very good mechanical properties, very good resistance to high temperatures and, above all, exceptionally high resistance to very many chemicals.

Duroglass®1025 can be used for all types of lamination work. Examples of typical applications are the lining of tanks, fibre-reinforced, heavy-duty floor coverings. The strengthening of load-bearing elements in the building sector. The manufacture of containers, pipes, tanks and other composite components in industry.

Composition	Epoxy-Acrylate resin
Appearance	Transparent, slightly dull, blue violet
Viscosity	320 - 335 mPa.s , 25°C
Monomer content	33 %
Density	1,08 g/ml, 25°C

Duroglass® resins need Duroglass® MEK Super Hardener 1027-B for starting and Duroglass®Cat 1027-C for accelerating. The use of hardener and accelerator is mandatory. The setting time is slightly variable.

Typical gel-times are 30 minutes, 20°C and 2,5% hardener and 50 minutes , 18°C and 2% hardener.

Typical processing times of Duroglass®1025 with Duroglass® MEK, which is the standard hardener are 30 minutes with 2,5% and 50 minutes with 2% hardener (at 18°C).

The gel and reaction times depend on temperature. Detailed dosage and mixing instructions suitable for different T-gels are available.

Properties

Typical properties of a cured resin at 25° C (a)

Properties	Data	Method	Data (US)	Method
Tensile strength	85 MPA	ISO 527	12,500 psi	ASTM D638
Tensile modulus	3600 MPa	ISO 527	5.2 x 10 ⁵ psi	ASTM D638
Elongation by stretching	3-4%	ISO 527	3-4%	ASTM D638
Flexural stiffness	130 MPa	ISO 178	19,000 psi	ASTM D790
Flexural modulus	3800 MPa	ISO 178	5,5 x 10 ⁵ psi	ASTM D790
Density	1,17 g/cm ³	ISO 1183		ASTM D792
Heat resistance Temperature (b)	150°C	ISO 75	300°F	ASTM D648
Glas transition temperature Tg ²	165°C	ISO 11357	330°F	ASTM D3418
Barkol Hardness	40	EN 59	40	ASTM D2583

(a) Curing time 24 hours at 20°C, or 2 hours at 155°C

(b) Maximum stress 1,8 MPa (364 psi)

Typical properties: 6 mm Laminate in Duroglass® System (a)

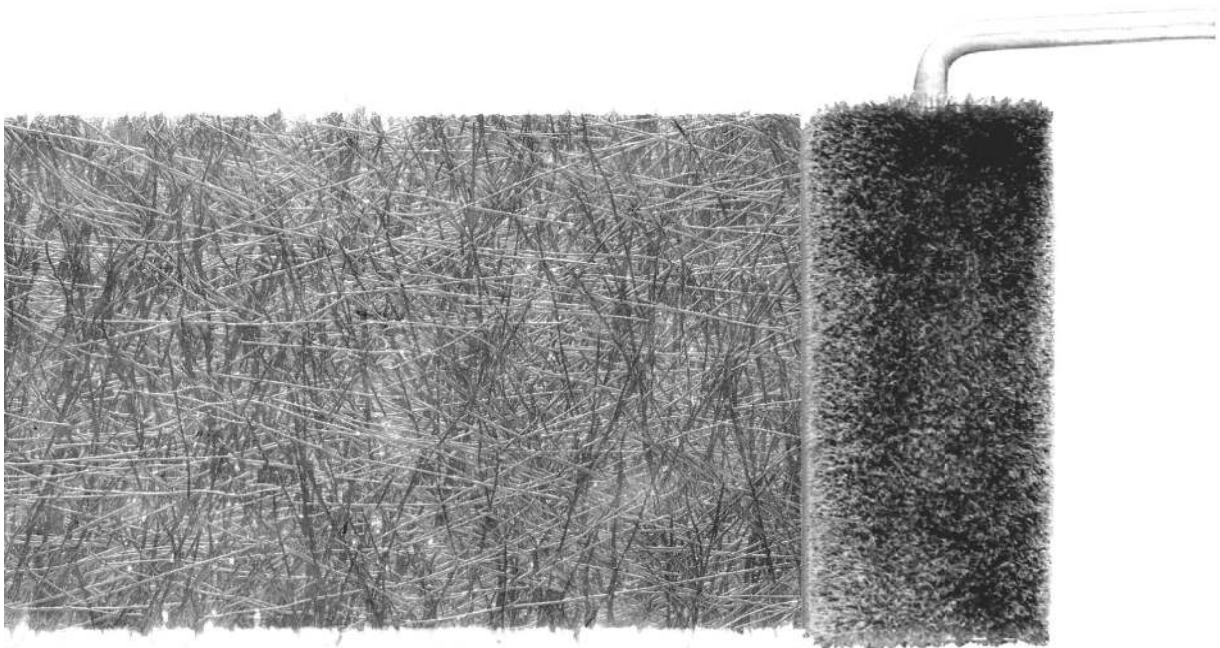
Properties	Values	Method	Values (US)	Method
Tensile strength	130 MPA	ISO 527	19,000 psi	ASTM D3039
Tensile modulus	12,000 MPa	ISO 527	1700 kpsi	ASTM D3039
Flexurals stiffness	210 MPa	ISO 178	30,000 psi	ASTM D790
Flexural modulus	8500 MPa	ISO 178	1200 kpsi	ASTM D790
Glas content	40%	ISO 1172	40%	ASTM D2584

(a) Hardening time 24 hours at 20°C, or 6 hours at 80°C

Storage Work safety

Duroglass®1025 must be kept cold and in original closed containers. Minimum shelf life is 10 month after production date and named on the label. resin, but the properties must be thoroughly evaluated before usage. Products must be stored safely and kept away from children and unauthorised personnel. product doesn't emit special risks. Working areas must be ventilated thoroughly.

MSDS are available for Duroglass®. It contains all current information on the safe handling and disposal of the product. We recommend that this safety data sheet be made available to all those who handle the product.



These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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passion to invent 