

Laminate



VETROTHERM S

- Superior mechanical properties at high temperatures
- Low thermal conductivity
- Low water absorption
- Excellent parallelism
- Very good electrical properties
- Good hydrocarbon stability
- Good chemical stability
- Long life expectancy
- Easy to machine

	Unit	Value	Test norm
Mechanical properties			
Flexural strength at 23°C	MPa	180	ISO 178
Flexural strength at 200°C	MPa	100	ISO 178
Compressive strength $\perp$, at 23°C	MPa	450	ISO 604
Compressive strength $\perp$, at 200°C,	MPa	380	ISO 604
Compressive strength $\perp$, at 250°C,	MPa	355	ISO 604
Electrical properties			
Electric strength $\perp$, at 90°C in oil	kV/mm	8	IEC 60243-1
Thermal properties			
Max. heat resistance (for short periods)	°C	350	
Heat resistance	°C	280	
Thermal conductivity	W/m·K	0.22	ISO 8301
Linear expansion coefficient //	1.0E-6/K	11	ISO 11359-2
Physical properties			
Density	g/cm ³	1.85 ± 0.1	ISO 1183
Water absorption	%	0.1	ISO 62

Description

Vetrotherm S is a laminate based on a high temperature resistant silicone resin and a glass fabric. Vetrotherm S is very well suited as heat insulating material that needs to withstand high to very high temperatures at moderate mechanical stresses.

RoHS Directive

Hazardous products listed in the EU-directive 2011/65/EU (RoHS-directive), annex II and amendment 2015/863/EU are not used as ingredients in this material.

Applications

Insulation of presses, thermal machined insulator parts, insulation of die casting machines and presses, glass industry, cast rubber moulds.

Form of delivery

Sheet formats:

2070 x 1070 mm, 1170 x 1070 mm
4200 x 1300 mm

Thickness range 6 to 30 mm

Thickness tolerance acc. to EN 60893-3-2

Sanded:

Standard: ± 0.1 mm (< 12 mm), above ± 1%
SuperFinish: ± 0.02 mm (on request)

Other dimensions and thicknesses on request.

Also available as panels or machined parts.

Machining

Machining with carbide or diamond tools.

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

VRI Composites custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

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