Laminate

VETRONITE EGS T23

- **High pressure laminate for high mechanical and electric requirements at high temperatures**
- **High temperature resistant resin matrix suitable for more than 200°C**
- **Very good chemical resistance**

	Unit	Value	Test norm
Mechanical properties			
Flexural strength	MPa	450	ISO 178
E-modulus	MPa	24000	ISO 178
Flexural strength at 150°C / 1h	MPa	350	ISO 178
Notched impact strength (Charpy), //	kJ/m²	60	ISO 179
Compressive strength // at 23°C	MPa	280	ISO 604
Compressive strength ⊥ at 23°C,	MPa	500	ISO 604
Tensile strength	MPa	330	ISO 527
Electrical properties			
Insulation resistance after immersion in water	Ohm	5.00E+12	IEC 62631-3-3
Breakdown voltage // 90°C in oil	kV	80	IEC 60243-1
Electric strength ⊥ 90°C in oil	kV/mm	18	IEC 60243-1
Relative permittivity at 1 MHz		5.0	IEC 62631-2-1
Dissipation factor at 1 MHz		0.018	IEC 62631-2-1
Comparative tracking index CTI		200	IEC 60112
Thermal properties			
Temperature index (TI)	TI	180	IEC 60216
Thermal conductivity	W/m·K	0.25	ISO 8301
Linear expansion coefficient //	1.0E-6/K	15	ISO 11359-2
Physical properties			
Density	g/cm³	1.90	ISO 1183
Water absorption	mg/%	10/0.05	ISO 62

Description
VETRONITE EGS T23 is an insulating laminate made of fine weave glass fabric bonded with special epoxy resin.
Especially suitable for short heat peaks.

Specifications

IEC/DIN EN 60893	EP GC 203/308
DIN 7735	HGW 2372.4 (*)
BS 3953	EP-7 (*)
NFC 26-151	Vt-EM 2 (*)
NEMA LI-1	G-11

(*) no longer valid since March 2003

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.

Colour
Olive grey

Applications
High voltage insulation parts
High temperature resistant machine parts
Slides for compressors and vacuum pumps
Cable channels

Form of delivery
Sheet format 1170 x 1070 mm
Size tolerance 0 / - 30 mm

Thickness range 0,2 to 150 mm
Thickness tol. acc. to DIN EN 60893-3-2

Also available as panels or machined parts.
Other dimensions and thicknesses on request.

Machining
Machining with carbide or diamond tools.

For water jet cutting we recommend adding silica sand to the water and drill through-holes prior to machine.