

# PERMAGLAS TGE 583

## POLYESTER FABRIC-EPOXY MATRIX

Leaflet  
96.08.891E



<b>SUPERIOR ELECTRIC PROPERTIES</b>	<b>GOOD STABILITY SF 6</b>	<b>NON-ABRASIVE</b>	<b>GOOD FRICTION COEFFICIENT</b>
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TGE 583 is a laminated insulant made of polyester Fabric and epoxy resin specially recommended for its high resistance to decomposition products of sulphur hexafluoride and its excellent friction and wearing properties.

Properties	Values	Units	Test standards
<b>PHYSICAL</b>			
Specific gravity	1,32	g/cm <sup>3</sup>	ISO 1183
Water absorption (thickness. 3 mm) C.Water-A20	<1	%	ISO 62
<b>MECHANICAL</b>			
Flexural strength ⊥	120	MPa	ISO 178
Modulus of elasticity in Flexure ⊥	4500	MPa	ISO 178
Compressive strength ⊥	400	MPa	ISO 604
Impact strength // (notched)	200	kJ/m <sup>2</sup>	ISO 179
Tensile strength //	160	MPa	ISO 527
<b>ELECTRIC</b>			
Transverse dielectric strength (thickness 3 mm) C90-H20	15	kV/mm	CEI 243
Longitudinal dielectric strength C90-H20	>80	kV	CEI 243
Dissipation factor at 50 Hz (tg δ) C105-A20	0,025		CEI 250
Permittivity at 50 Hz (ε) C105-A20	3,5		CEI 250
Total insulating resistance C.Water-A20	10 <sup>11</sup>	Ω	CEI 167
Tracking index	600	V	CEI 112
<ul style="list-style-type: none"> <li>• Conditioning : <ul style="list-style-type: none"> <li>•Cn : 24h/23°C/50 %</li> <li>•C90 : 4h/90°C/&lt;20 %</li> <li>•A20 : M/15-35°C/45-75 %</li> </ul> </li> <li>• Testing ambiency :</li> <li>• Non-specified testing conditions : Cn-A20</li> <li>•C.Water : 24h/23°C/Water.</li> <li>•C105 : 96h/105°C/&lt;20 %</li> <li>•H20 : M/23°C/oil</li> </ul>			

**Sizes** : Standard 1150 x 1080 mm. Maximum 2150 x 1080 mm.

**Thicknesses** : 2 mm to 50 mm, from mm to mm.  
For other sizes and thicknesses contact us.

**Colour** : light brown.

### MACHINING

Our factories can carry out all types of machining to meet your requirements, thanks to their state of the art machining facilities including CNC/Digitally controlled machines.

The characteristics indicated are the results of tests conducted in our laboratories and correspond to average measurement values. However, we cannot accept any responsibility for their accuracy.

FRANCE	Permal Composites 8, rue A.Fruchard BP12 F54320 MAXEVILLE <a href="http://www.permali.fr">www.permali.fr</a> - <a href="mailto:info@permali.fr">info@permali.fr</a>	PHONE 03.83.34.24.24	FAX 03.83.32.23.18	LEAFLET cancels and takes place of 96.03.891E
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