

Data sheet	<b>SICATHERM</b>
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<u>General</u>
<p>SICATHERM is a mica laminate designed for electro-mechanical and thermo-mechanical applications requiring one or more of the following properties:</p> <ul style="list-style-type: none"> <li>- excellent resistance to heat and even to open flame up to 1000°C</li> <li>- low thermal conductivity</li> <li>- excellent electrical insulation</li> <li>- high resistance to pressure</li> <li>- impervious to most chemicals, in particular oil and grease</li> <li>- <b>ASBESTOS-FREE</b></li> <li>- ecologically safe and non-toxic</li> </ul> <p>Applications: e.g. glass industry: in the hollow glassware industry, SICATHERM's thermal qualities and abrasion resistance make it ideal for the parts which guide bottles and containers as they leave the mould, where temperature may exceed 700°C.</p>

<u>Technical datas:</u>	M (Muscovite)	P (Phlogopite)
density	2.1 - 2.25 g/cm <sup>3</sup>	
Water absorption 24h / 23°C	< 0.1 %	
Compressive strength (ISO 604) - at 20°C - at 200 °C (Measurement at 200 °C) - at 400 °C / 1 h (Measurement at 20 °C) - at 600 °C / 1 h (Measurement at 20 °C)	400 MPa 250 MPa 375 MPa 375 MPa	330 MPa 240 MPa 330 MPa 330 MPa
Young's modulus at pressure (ISO 604) - at 20°C - at 200 °C (Measurement at 200 °C) - at 400 °C / 1 h (Measurement at 20 °C) - at 600 °C / 1 h (Measurement at 20 °C)	8000 MPa 5000 MPa 8350 MPa 10200 MPa	5700 MPa 4300 MPa 5700 MPa 5700 MPa
Tensile strength (ISO 527)	120 MPa	
Bending strength (ISO 178)	200 MPa	
Resistance to thermal shocks - up to 6 mm thickness - over 6 mm thickness	500 °C 400 °C	400 °C 200 °C
Weight loss continuous temperature at 500 °C 700 °C	< 1 %	< 1 % < 2 %
Thermal conductivity - perpendicular to plane of the plate - along the plane of the plate	0,3 W/mK 3 W/mK	
Specific heat	866 J/kg°C	

<u>Availability:</u>	
Plate size: 1220 x 1016 mm (untrimmed)	Usable area: 1200 x 1000 mm
Thickness: up to 80 mm	