

**THERMALITE 500 – TH500**

<b>WITHOUT ASBESTOS</b>	<b>HIGH MECHANICAL RESISTANCE UNDER HEAT</b>	<b>GOOD THERMAL PERFORMANCES</b>	<b>USE UP TO 700°C</b>
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Thermalite 500 is specially designed for thermal insulation of presses working continuously up to 500°C. It combines a very high temperature resistance (700°C at peak) and a remarkable fire resistance (M0) with a very good insulation capacity under high mechanical stresses. It can be delivered in plane plates rectified 2 sides. Thicknesses from 2 to 80 mm, formats : please contact us.

Physical Properties	Values	Units	Tests Standards
Density	2,15	g/cm <sup>3</sup>	ISO 1183/1
Water absorption (thickness 10 mm)	<0,5	%	ISO 62/1
Resistance to chemicals	excellent		

Mechanical Properties	Values	Units	Tests Standards
Compressive rupture stress ⊥ At 20°C	400	MPa	ISO 604
At 350°C	250	MPa	ISO 604
Bending rupture stress NF ⊥ At 20°C	230	MPa	ISO 178
At 400°C	135	MPa	ISO 178
Tensile rupture stress // At 20°C	260	MPa	ISO 527

Thermal Properties	Values	Units	Tests Standards
Continuous limit temperature	500	°C	
Peak limit temperature	700	°C	
Thermal conductivity	0,25	W/m°C	NF X 10021
Coefficient of linear dilatation // to strata*	10 10-6	m/mK	NF T 51221
Coefficient of linear dilatation ⊥ to strata*	60 10-6	m/mK	NF T 51221

Electrical Properties	Values	Units	Tests Standards
Transverse dielectric rigidity (3mm) C90-H20	25	KV/mm	CEI 243-1
Dissipation factor 50Hz (tg δ) C105-A20	0,01	-	CEI 250
Permittivity 50Hz (ε) C105-A20	6,5	-	CEI 250
Total insulation resistance Cn-A20	>10 <sup>10</sup>	Ω	CEI 167
C.water-A20	>10 <sup>8</sup>	Ω	CEI 167
Tracking resistance index	600	V	CEI 112 /A

\* : average coefficients of linear dilatation between 30°C and 200°C

*Les valeurs indiquées dans ces fiches techniques sont des valeurs moyennes mesurées lors des tests de contrôle courant. Les données s'appliquent uniquement aux caractéristiques des matériaux et ne peuvent conduire à des engagements commerciaux que sur la base d'un accord express.*