Laminate

ALTHERM 520

- **Laminate with high mechanical properties especially at high temperatures**
- **High resistance against chemicals**
- **Good electrical insulation properties**
- **Good temperature resistance**
- **Low water adsorption**

	Unit	Value	Test norm
Mechanical properties			
Flexural strength	MPa	450	ISO 178
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
Electric strength ⊥ 90°C in oil	kV/mm	18	IEC 60243-1
Comparative tracking index CTI		200	IEC 60112
Thermal properties			
Temperature index (TI)	°C	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/cm^3	1.85	ISO 1183
Water absorption	%	0.05	ISO 62

Description
Altherm 520 is an insulating laminate made of fine weave glass fabric bonded with special epoxy resin especially developed for applications in aluminium smelters.

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
Yellow brown

Applications
Different parts of aluminium smelters:
- busbar electrical insulation
- superstructure support
- pot room thermal and electrical insulation
- pot conductor insulation

Form of delivery
Sheet formats 1170 x 1070 mm, 2070 x 1070 mm
Size tolerance 0 / - 30 mm

Thickness range 0.2 to 100 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.

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