

MICATECH® 900-1100

MICATECH® offers tailored solutions to many applications in the form of precision complex shapes and boards based on Vermiculite. MICATECH® components are available in a range of densities and high integrity binders selected to suit the chosen application. They are non-irritant, odourless and clean to handle.



ADVANTAGES AND PROPERTIES

- Low thermal conductivity
- Low density
- Good mechanical strength
- Resistance to flame impingement
- Inorganic
- High temperature resistance
- High electrical resistance
- Good chemical resistance to acids and alkalis
- Easy handling and installation
- Close dimensional control
- No known health hazards

STRUCTURE

- Vermiculite is a natural, micaceous mineral from the group of hydrosilicates. Large deposits are known and mined in areas with volcanic history.
- The outstanding characteristic of the mineral is its ability to expand, on

rapid heating between 900 and 1000 °C, as much as 25 times its' original volume. This is due to the pressure of molecular water evaporating which causes the mineral layers to exfoliate and expand. The formation of numbers of interlayer voids causes a sharp reduction in unit weight, this texture of expanded vermiculite accounts for its' low thermal conductivity.

WORKING AND PROCESSING

- MICATECH® can be worked easily both with woodworking tools and machines. It can be sawn, drilled and sanded.
- cutting to size
When cutting to size, the maximum workplace concentration values for dust generation must be observed. In general dust suction is recommended.

AREAS OF APPLICATION

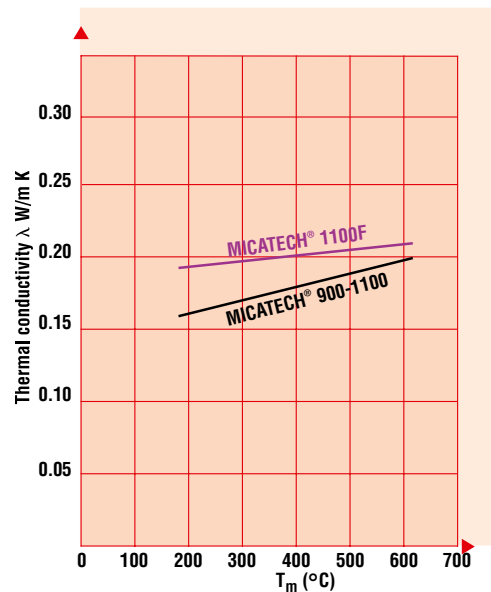
- Insulation around hot-plates
- Night storage heaters
- Wood burning stoves and open fire places
- Boilers
- Hotface and back-up insulation in industrial furnaces and kilns
- Data recording equipment protection
- Primary and secondary aluminium
- Thermocouple sleeving
- Roller seals





TECHNICAL DATA

Product name	MICATECH® 900	MICATECH® 1100	MICATECH® 1100 F	
Color	ochre	ochre	ochre	
Building material class according to DIN 4102	A1, non-combustible	A1, non-combustible	A1, non-combustible	
Classification temperature	900	1050	1050	°C
Bulk density ρ	600 ± 50	600 ± 50	700 ± 50	kg/m³
Cold compressive strength	4,2	4,2	4,5	N/mm²
Modulus of rupture	1,5	1,5	2,0	N/mm²
Total porosity	75	75	75	%
Specific heat coefficient C	0,94	0,94	0,94	kJ/kgK
Shrinkage at				
900° C, 12 h	2	0,1	-	%
1050° C, 12 h	-	1,5	1,5	%
Thermal conductivity at				
200° C	0,16	0,16	0,19	W/mK
400° C	0,18	0,18	0,20	W/mK
600° C	0,20	0,20	0,21	W/mK



Dimensional tolerances of standard boards:
Lengths and widths: 0 up to + 8 mm
Thicknesses: ± 1,5 mm

Dimensional tolerances of standard boards,
edge-planed and sanded:
Lengths and widths: ± 1,0 mm
Thicknesses: ± 0,5 mm

Dimensional tolerances of half-pipe sections:
Lengths: - 4 up to + 3 mm
Thicknesses: - 1 up to + 2 mm

STANDARD SIZES

Promat contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. In case of any doubt if these properties and/or values are matching the application requirements, please contact Promat for advice.



Dimensions	boxes/pallet
1000 x 610 x 25 mm	144
1000 x 610 x 30 mm	120
1000 x 610 x 35 mm	100
1000 x 610 x 40 mm	96
1000 x 610 x 45 mm	80
1000 x 610 x 50 mm	72
1000 x 610 x 60 mm	60
1000 x 610 x 65 mm	56
1000 x 610 x 70 mm	50
1000 x 610 x 75 mm	48
1000 x 610 x 80 mm	44

Other sizes are available on request