

Promat

Promat[®] MICATECH 1100

Precision High Temperature Panels and Components

MATERIAL DESCRIPTION

High temperature insulating board based on exfoliated vermiculite and inorganic binders. The material is formulated without asbestos and organic substances. Vermiculite is an aluminium-magnesium-layer silicate, which exfoliates to ultra lightweight granules through heating and is manufactured into boards through a compression mould process.

ADVANTAGES AND PROPERTIES

- Thermal shock resistance, can be used as a furnace hot face lining
- Non-combustible
- No smoke emission during first heating
- Low thermal conductivity
- High thermal resistance
- High electrical resistance
- Easy handling and installation
- Good chemical resistance to acids, alkalis and exhaust gases
- Resistant to CO and CH₄ atmosphere; hardly wetted by fluid aluminium, cryolite and fluoride.

TYPICAL PRODUCT PERFORMANCE

	Promat [®] MICATECH 1100L	Promat [®] MICATECH 1100M
Colour	Oatmeal	Oatmeal
Classification temperature (°C)	1100	1100
Nominal density (kg/m ³)	375	600
Cold compressive strength, (EN 1094-5: 1995) at room temperature (MPa)	1.3	4.2
Thermal conductivity at a mean temperature of (W/mK) (ASTM C-182)		
200°C	0.12	0.16
400°C	0.15	0.18
600°C	0.16	0.20
Modulus of rupture (EN 993-6: 1995) (MPa)	0.5	1.6
Specific heat (kJ/kg K)	0.94	0.94
Linear shrinkage (EN 1094-6: 1999) 12h at 1000°C %	1.0	1.0

PRODUCT RANGE

Standard Dimensions	
Length x width (mm)	1000 x 610
Thickness (mm)	20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 80





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WORKING AND PROCESSING

Promat® MICATECH 1100 can be worked easily with woodworking machinery. It can be sawn, drilled and sanded.

CUTTING TO SIZE

When cutting to size, Workplace Exposure Limit (WEL) for dust generation must be observed. In general, dust extraction is recommended.

AREAS OF APPLICATIONS

In industrial furnace construction for thermal insulation, directly in the furnace and as back up insulating material. Also used in the household appliances industry for:

- Night storage heaters
- Back-up insulation
- Boilers
- Fire hearths
- Vessels and tanks



CONTACT NUMBERS

Technical Services

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Customer Services

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HEALTH AND SAFETY

A safety data sheet is available from the Promat Technical Services Department and, as with any other materials, should be read before working with the board. The board is not classified as a dangerous substance and so no special provisions are required regarding the carriage and disposal of the product to landfill. They can be placed in an on-site skip with other general building waste which should be disposed of by a registered contractor.

Promat

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