

# Technical Data Sheet

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## Model Board M250

*0.25 g/cm<sup>3</sup> Polyurethane Model Board*

Model Board M250 is a board and block material, which can be worked manually or by machine.

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### Applications

- Test milling programmes
- Back filling of moulds and patterns
- Styling and display models
- Test models
- Draw dies
- Substructure for hard styling clay
- Large volume models

### Technical Data

Property	Units	Typical Value
Colour	-	Apricot
Coefficient of Thermal Expansion	$\times 10^{-6}K^{-1}$	40
Temperature Resistance	°C	55
Hardness	Shore D	23
Compressive Strength	N/mm <sup>2</sup>	3.6
Flexural Strength	N/mm <sup>2</sup>	5.15
Density	g/cm <sup>3</sup>	0.25
Fire Protection Classification	-	B3
Thermal Conductivity	W/m.K	0.045

Model Board M250 contains no halogens, plasticizer or solvent. Model Board M250 is manufactured fluorocarbohydrate-free and is physiologically harmless.

### Board Measurements

Product Code	Board Size (mm)
M250-2	1000 x 1000 x 50
M250-4	1000 x 1000 x 100
M250-14	2000 x 1000 x 100

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## Storage / Transport

Model Board M250 should be stored on a flat surface and in a dry space at a temperature between 18°C and 25°C. Variations in temperature should be avoided during the transport and storage.

## Processing

Model Board M250 can be processed using wood or metal working tools. Boards of M250 can be combined using Model Board Adhesive MG 301 or MG 301S.

## Milling Parameters

Property	Units	Roughing	Finishing
Type of Tool	-	Finishing tools d = 80mm	Finishing tools d = 80mm
Tool Diameter [d]	mm	80	80
Cutting Speed [Vc]	m/sec	50	50
Speed [n]	1/min	12,000	8,000
Feed Speed	m/min	12	8
Tooth Speed [fz]	mm	0.25	0.25
Number of Teeth [z]	-	4	4
Cutting Depth [a <sub>e</sub> ]	mm	10	0.5
Cutter Mark Length [f <sub>zeff</sub> ]	mm	38	15

## Further Information

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

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Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by Alchemie Ltd. This material does not contain any fillers that release harmful dust during machining. Nevertheless the dust content in the air should not rise above 6 mg/m<sup>3</sup>. Safety procedures recommended by the vocational co-operative of the chemical industry should be complied with. The article is not a regulatory product according to ICC regulations. In accordance with general local and national regulations waste is to be disposed by incineration in authorised places or conveyed to authorised tips (EAK 120105).

## **Alchemie Limited**

Alchemie Ltd develop, formulate and distribute Epoxy Resins, Polyurethane Resins, Silicones, Model Boards and Sheet Wax for use in the following applications:

- Electrical encapsulation
- Rapid Prototyping
- Prototypes
- Casting
- Gel Coating
- Laminating
- Model Making
- Master Models
- Flexible and rigid mould making

We offer fast service, technical support, development expertise, innovative products, diverse knowledge and experience.

We are a well-established company, with a high level of investment and experience. We implement BS EN ISO 9001.

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