

Technical Data Sheet

Model Board M450

0.48 g/cm³ Polyurethane Model Board

Model Board M450 is a board and block material with low density, excellent processing properties and a fine, homogeneous surface. Model Board M450 is conveniently machinable and can also be processed manually.

Applications

- Master and copy models
- Styling models
- Wind tunnel and water channel models
- Architectural models
- General Modelling

Technical Data

Property	Units	Typical Value
Colour	-	Apricot
Coefficient of Thermal Expansion	K ⁻¹	40 x 10 ⁻⁶
Temperature Resistance	°C	50
Hardness	Shore D	50
Density	g/cm ³	0.48
Abrasion Resistance (at defined parameters)	mm ³	1.266
Fire Protection Classification	-	B2

Model Board M450 contains no halogens, plasticizer or solvent. Model Board M450 is manufactured fluorocarbohydrate-free and is physiologically harmless.

Board Measurements

Product Code	Board Size (mm)
M450-2	1500 x 500 x 50
M450-3	1500 x 500 x 75
M450-4	1500 x 500 x 100
M450-6	1500 x 500 x 150

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Processing

Model Board M450 can be processed using wood or metal working tools. Boards of M450 can be combined using Model Board Adhesive MG 480 or other suitable pattern making adhesives.

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	10	7.5
Tooth Speed [fz]	mm	0.21	0.21
Number of Teeth [z]	-	4	4
Cutting Depth [a _e]	mm	9	0.4
Cutter Mark Length [f _{zeff}]	mm	38	10

Storage / Transport

Model Board M450 should be stored on a flat surface and in dry conditions at a temperature between 18 and 25°C. Variations in temperature should be avoided during transport or storage.

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/m³. 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

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- 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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