

Technical Data Sheet

Model Board M702

0.79 g/cm³ Epoxy Model Board

Model Board M702 is an epoxy board material with very high heat resistance and very low coefficient of thermal expansion making it ideal for applications where dimensional stability is essential.

Applications

- Carbon fibre tooling
- Prepreg lay up tools
- Laminating forms and patterns

Technical Data

Property	Units	Typical Value
Colour	-	Green
Coefficient of Thermal Expansion	K ⁻¹	42 x 10 ⁻⁶
Temperature Resistance	°C	130
Hardness	Shore D	74
Compressive Strength	N/mm ²	57
Flexural Strength	N/mm ²	35
Density	g/cm ³	0.79

Model Board M702 contains no halogens, plasticizer or solvent. Model Board M702 is manufactured fluorocarbohydrate-free and is physiologically harmless.

Board Measurements

Product Code	Board Size (mm)
M702-1	1500 x 500 x 25
M702-2	1500 x 500 x 50
M702-3	1500 x 500 x 75
M702-4	1500 x 500 x 100
M702-6	1500 x 500 x 150

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Processing

Boards of M702 can be combined using ALCHEMIX EP 5941 Model Board Adhesive. We recommend that boards are square and plane-parallel to ensure good glue joints.

Machining

Use metal working tools. When producing voluminous models from Model Board 702, we generally recommend to ensure that the material is not thicker than 10 cm (recommendation: milling the inside of the tool) to assure an even heating of the tool. This measure prevents the formation of cracks.

Property	Units	Roughing	Finishing
Type of tool	-	Finishing tools	Finishing tools
Tool diameter (d)	mm	80	80
Cutting speed (Vc)	m/sec	50	50
Revolutions (n)	min ⁻¹	12000	8000
Feed Speed	m/min	10	7.5
Tooth Speed (fz)	mm	0.21	0.21
Number of Teeth (z)	-	4	4
Cutting Depth (ae)	mm	6	0.5
Cutter Mark Length (fzeff)	mm	38	5-10

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.

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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).

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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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