

Description

Modelboard M730 is an epoxy board material with very high temperature resistance and very low coefficient of thermal expansion making it ideal for applications where dimensional stability is essential.

Features

- Epoxy board
- Very high temperature resistance
- Very low coefficient of thermal expansion

Applications

- Prepreg lay-up tools
- Vac form tools
- Laminating patterns and tools

Technical Data

	Typical Value
Colour	Blue
Temperature Resistance	130 °C
Coefficient of Thermal Expansion	$23 \times 10^{-6} \text{ K}^{-1}$
Hardness	75D
Density	0.855 gcm^{-3}

Modelboard M730 contains no halogens, plasticizer or solvent, it is manufactured fluorocarbohydrate free and is physiologically harmless.

Processing

Boards of M730 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

Modelboard M730 can be machined with metal working tools and should be machined at 20 – 25°C.

When producing voluminous models Modelboard M730, 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.

Recommendation for tempering: Increase by 1°C every 3 minutes.

Machining epoxy boards with a laser may produce (depending on the processing temperature) visible sooty decomposition products, water vapor and carbon dioxide as well as carbon monoxide and traces of phenols.

Milling Parameters

	Roughing	Finishing
Type of Tool	Finishing Tools d = 80mm	Finishing Tools d = 80mm
Tool Diameter (d)	80 mm	80 mm
Cutting Speed (Vc)	50 m/sec	50 m/sec
Speed (n)	12000 min ⁻¹	8000 min ⁻¹
Feed Speed	10 m/min	7.5 m/min
Tooth Speed (fz)	0.21 mm	0.21 mm
Number of Teeth (z)	4	4
Cutting Depth (ae)	6 mm	0.5 mm
Cutter Mark Length (fzeff)	38 mm	5 – 10 mm

Storage and Transport

Modelboard M730 should be stored on a flat surface, in dry conditions, at a temperature between 18 – 25°C. Variations in temperature should be avoided during storage.

Board Sizes

Product Code	Dimensions
M730-2	1500 x 500 x 50mm
M730-3	1500 x 500 x 75mm
M730-4	1500 x 500 x 100mm

Surfaces are machined parallel.

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 Data Sheet (TDS) and Safety Data Sheets (SDS) 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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