



# NECURON® 730

## EPOXY BOARD MATERIAL - TECHNICAL DATA SHEET

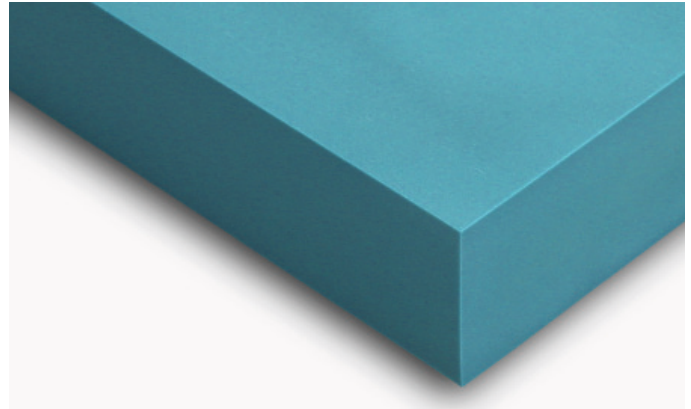
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### CHARACTERISTICS

- 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

Color	blue
Coefficient of thermal expansion	approx. $16.11 \times 10^{-6} \text{ F}^{-1}$
Temperature resistance	approx. 266 °F
Shore D	approx. 75
Compressive strength	approx. 8,267 psi
Flexural strength	approx. 4,786 psi
Density	approx. 53.06 lb./ft <sup>3</sup>
Abrasion resistance (at defined parameters)	approx. - in <sup>3</sup>
Fire protection classification	-
Electrical current resistance	approx. - $\Omega \times \text{in}$
Notched impact strength	approx. - ft.lb./in <sup>2</sup>
Thermal conductivity	approx. - BTU-in/hr-ft <sup>2</sup> -°F

- Contains no halogens, plasticizer or solvent
- Manufactured fluorocarbohydrate-free
- Physiologically harmless

### DIMENSIONS

59.1	19.7	1.97	inch
59.1	19.7	2.95	inch
59.1	19.7	3.94	inch
59.1	19.7	5.90	inch

Surfaces machined parallel.  
Other dimensions on request.

### STORAGE/TRANSPORT

NECURON®-boards should be stored on a flat underground and in a dry space at a temperature between 64.4°F and 77°F. Variations in temperature should be avoided during the transport and storage.



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### PROCESSING

Adhesive	Color	Mixture ratio A to B (by weight)	Pot life in minutes at 68°F	Curing time at 68°F in hours
NECURON® K7S	straw-colored	100:25	20 - 30	4 - 5

or usual and compatible patternmaking adhesives/resins  
We recommend that boards are plane-parallel to ensure good glue joints.

### MACHINING

Machining temperature: 68°F - 77°F  
Tools: Metal-cutting tools

When producing voluminous models from NECURON® 730 VP, we generally recommend to ensure, that the material is not thicker than 3.94 inches (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 33.8°F 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

Type of tool	ROUGHING	FINISHING
	Finishing tools d = 3.15 in	Finishing tools d = 3.15 in
Tool diameter [d] (in)	3.15	3.15
Cutting speed [Vc] (ft.sec)	164	164
Speed [n] (1/min)	12000	8000
Feed speed (ft./min)	32.81	24.61
Tooth speed [fz] (in)	0.0083	0.0083
Number of teeth [z]	4	4
Cutting depth [ae] (in)	0.236	0.020
Cutter mark length [fzeff] (in)	1.50	0.20-0.39

### NECURON® 730

- This material does not contain any fillers that release harmful dust during machining. Nevertheless the dust content in the air should not rise above 0.2 lb/in<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).
- Technical statements and recommendations refer to current standard of technique and are based on our own experience. Further developments and improvements are reserved. Due to the variety of processing possibilities own experiments are recommended to optimise results.
- This data sheet is not legally binding. Actual specifications and / or features may vary.