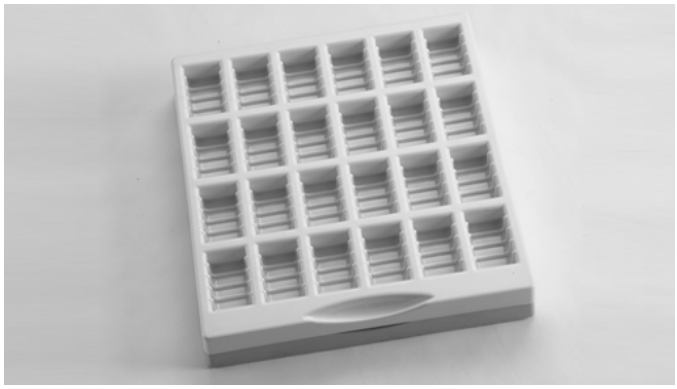
NECURON® 690
BOARD MATERIAL - TECHNICAL DATA SHEET

CHARACTERISTICS
- very high temperature resistance at a low density
- very low coefficient of thermal expansion

APPLICATIONS
- tools for serial production of small batch sizes (e.g. draw die molds and foam molds)
- laminating tools, models and patterns
- RIM-tools
- Vacuum forming, deep-draw dies



TECHNICAL DATA

Color	grey
Coefficient of thermal expansion	approx. 19,44 x 10^{-6} F^{-1}
Temperature resistance	approx. 221°F
Shore D	approx. 62
Compressive strength	approx. 4,931 psi
Flexural strength	approx. 3,292 psi
Density	approx. 43.69 lbs/ft^3
Abrasion resistance (at defined parameters)	approx. - in^3
Fire protection classification	B2
Electrical current resistance	approx. - Ω x in
Notched impact strength	approx. - ft.lb./in^2
Thermal conductivity	approx. - BTU-in/hr-ft^2-°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

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® K8T	colorless	1:0.2	30	18

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

MILLING PARAMETERS

	ROUGHING	FINISHING
Type of tool	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)	0.157	0.020
Cutter mark length [fzeff] (in)	1.50	0.20

NECURON® 690

- 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^3. 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 authorized places or conveyed to authorized 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.

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