



NECUMER
SOLID SOLUTIONS

NECURON[®] 200

POLYURETHANE BOARD MATERIAL - TECHNICAL DATA SHEET

TECHNICAL DATA

Colour
Coefficient of thermal expansion
Temperature resistance
Shore D
Compressive strength
Flexural strength
Density
Abrasion resistance (at defined parameters)
Fire protection classification
Electrical current resistance
Notched impact strength
Thermal conductivity

CHARACTERISTICS

- PROCESSING POSSIBLE BY HAND AND MACHINE
- PLEASANT AND QUICK TO PROCESS

APPLICATIONS

- TEST MILLING PROGRAMMES
- BACK FILLING OF MOULDS AND PATTERNS
- STYLING AND DISPLAY MODELS
- TEST MODELS
- DRAW DIES
- SUBSTRUCTURE FOR HARD STYLING CLAY
- LARGE VOLUME MODELS

DIMENSIONS

BASIC FORMAT (MM)

1,000 x 1,000

2,000 x 1,000

AVAILABLE HEIGHTS (MM)

50, 100

100

Other dimensions on request.

Surfaces machined parallel.

beige
approx. $50 - 80 \times 10^{-6} \text{ K}^{-1}$
approx. $120 - 125 \text{ }^\circ\text{C}$
approx. -
approx. 2.7 N/mm^2
approx. 3.0 N/mm^2
approx. 0.20 g/cm^3
approx. - mm^3
-
approx. - $\Omega \times \text{cm}$
approx. - kJ/m^2
approx. 0.038 W/mk

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

PROCESSING

| ADHESIVE | COLOUR | MIXTURE RATIO A TO B (BY WEIGHT) | POT LIFE IN MINUTES AT 20°C | CURING TIME AT 20°C |
|-------------|--------------------|-------------------------------------|--------------------------------|------------------------|
| NECURON® K0 | CREAM- COLOURED | 1:1 | 2-3 | 25-30 MIN |

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

MACHINING

Machining temperature: 20°C - 25°C

Tools: Wood- or metal-working tools

Machining polyurethane 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 nitrogenous compounds, including nitrogen oxides and traces of hydrogen cyanide and isocyanate vapors.

MILLING PARAMETERS

| PARAMETERS | ROUGHING | FINISHING |
|--------------------------------|------------------------|------------------------|
| Type of tool | Finishing tools d=80mm | Finishing tools d=80mm |
| Tool diameter [d](mm) | 80 | 80 |
| Cutting speed [Vc](m/sek) | 50 | 50 |
| Speed [n](1/min) | 12000 | 8000 |
| Feed speed (m/min) | 12 | 8 |
| Tooth speed [fz](mm) | 0.25 | 0.25 |
| Number of teeth [z] | 4 | 4 |
| Cutting depth [ae](mm) | 10 | 0.5 |
| Cutter mark length [fzeff](mm) | 38 | 15 |

STORAGE/TRANSPORT

NECURON®-boards should be stored on a flat underground and in a dry space at a temperature between 18°C and 25°C.

Variations in temperature should be avoided during transport and storage.

NECURON® 200

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). 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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