

MACHINABLEFOAM

Fab Lab Tulsa

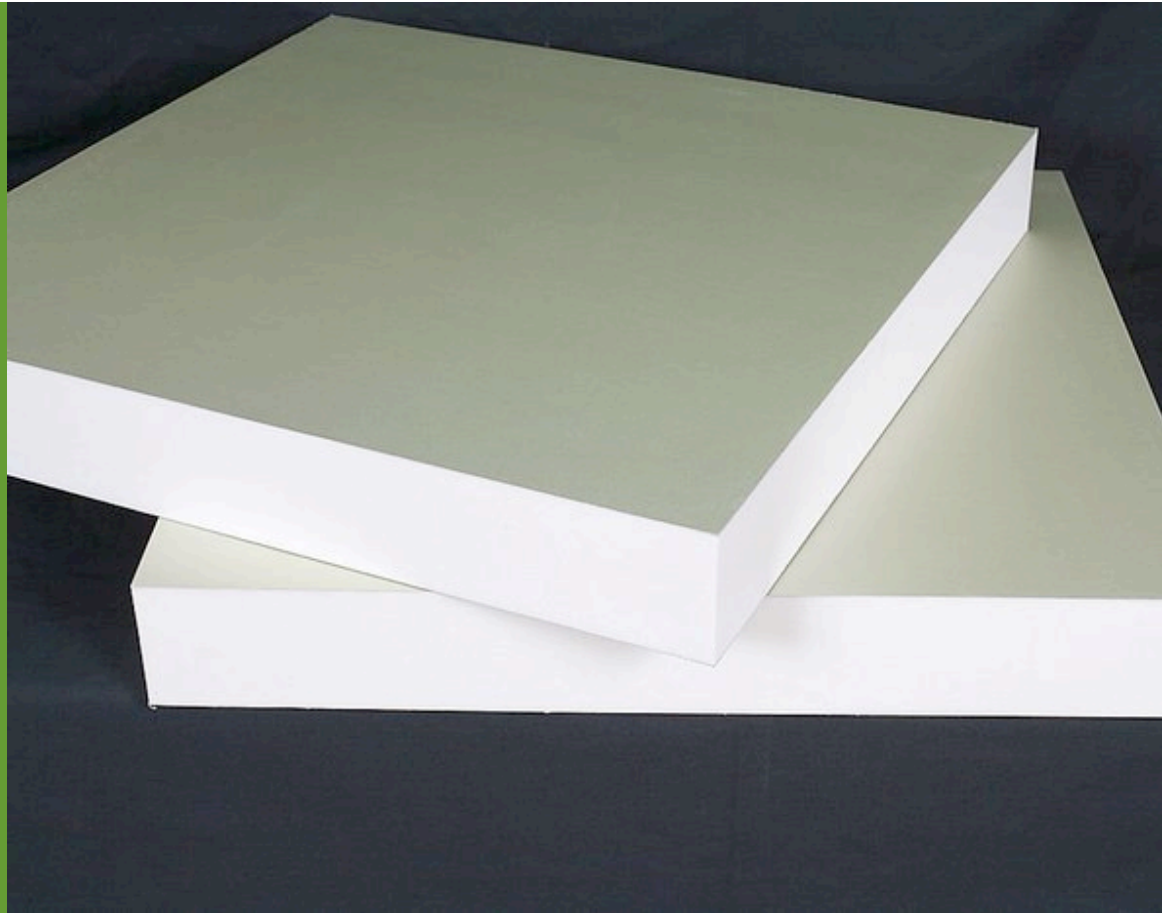
For:
3D Design

Machine:
ShopBot
Mini-Mill

Dimensions:
1" x 6" x 4"
1" x 6" x 8"
* 2" x 6" x 4"
* 2" x 6" x 8"

* Layered From 1" Blocks

Color Options:
Cream



Material Profile

Description

Ultra-Machinable High-Strength Urethane Foam.

Design Notes

Suitable for the most demanding thin-wall prototyping, this material can be sanded and is virtually nonabrasive. Tolerance on all dimensions is +1". Density is 48 lbs./cu. ft., hardness is Shore D63, and softening point is 248° F. All dimensions have a $\pm 1/8$ " tolerance.

Typical Uses

Machinable Foam can be used to produce accurate molds and prototypes. Use for prototypes where a grain-free material is desired. It can be bonded with epoxy, super glue, contact cement, or polyurethane and acrylic adhesives.

Environmental Info

100% recyclable

MACHINABLEWAX

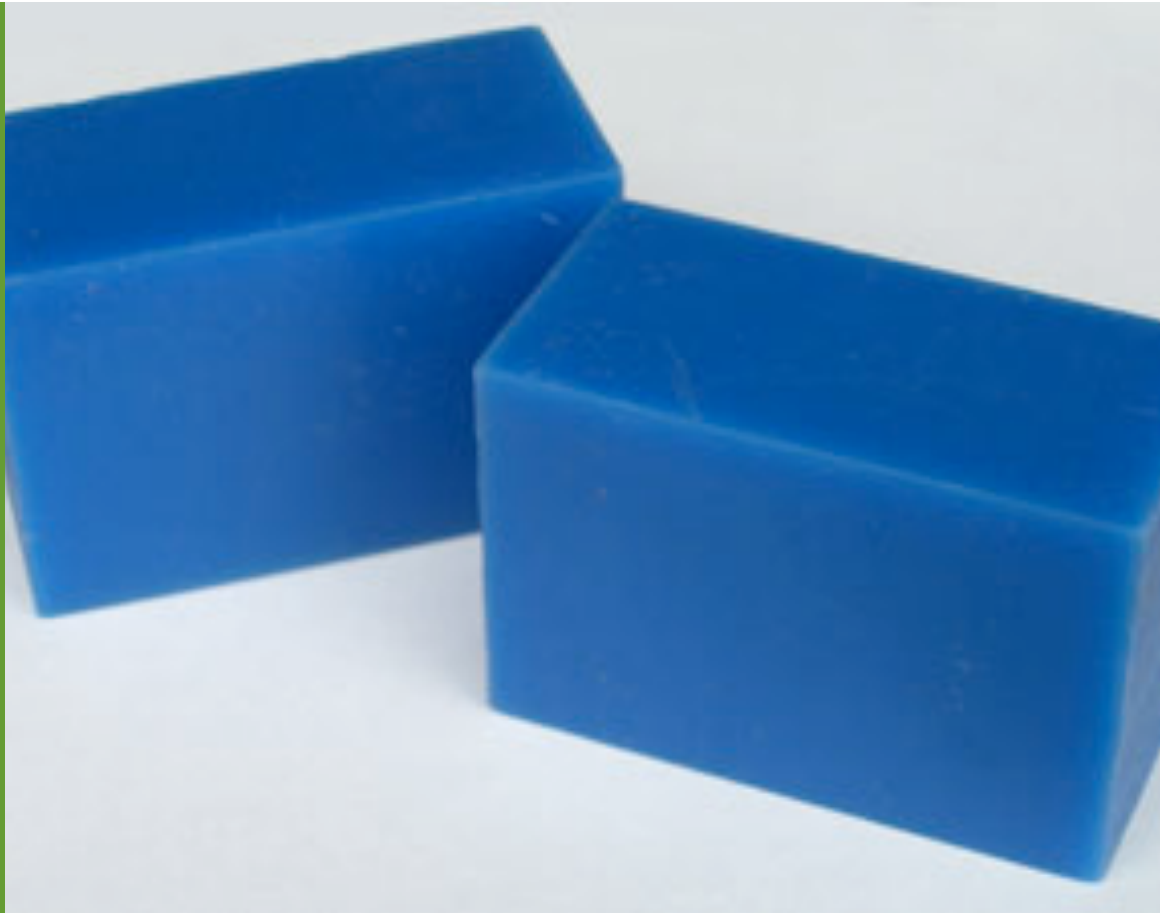
Fab Lab Tulsa

For:
3D Design

Machine:
Mini-Mill

Dimensions:
1.25" x 3.5" x 12"

Color Options:
Blue
Purple



Material Profile

Description

Nonabrasive wax.

Design Notes

Extremely hard, hybrid plasticized wax blend. It can be turned, milled, drilled, tapped, carved, and sawed easily without tool wear. Softening point is 222° to 244° F. Hardness is Shore 50D-52D. All dimensions have a $\pm 1/8$ " tolerance.

Typical Uses

Machinable Wax can be used to produce accurate molds and prototypes

Environmental Info

100% recyclable

MDFSHEETS

Fab Lab Tulsa

For:
2D Design

Machine:
ShopBot
Mni-Mill

Thickness:
.750"

Color Options:
Natural



Material Profile

Description

A particle board pressed into a panel with the addition of resin and wax

Design Notes

MDF has a smooth sanded finish. It is sensitive to moisture.

Typical Uses

MDF is typically used joinery and furniture applications

Adhesives, Joints, and Fastenings

Construction adhesives or wood glues will bond boards well. Follow the adhesive manufacturer's instructions for application processes. Screw and nail joints should be pre-drilled to avoid splitting particularly near the edge.

PARTICLEBOARD SHEETS

Fab Lab Tulsa

For:
2D Design

Machine:
ShopBot
Mni-Mill

Thickness:
.750"

Color Options:
Natural



Material Profile

Description

Engineered wood manufactured from wood particles, such as wood chips, sawmill shavings, or saw, and a synthetic resin or other suitable binder, which is pressed and extruded.

Design Notes

Particle Board can potentially warp which can affect the flatness of parts. It is sensitive to moisture.

Typical Uses

Home furnishings such as shelving, entertainment centers and bookcases.

Adhesives, Joints, and Fastenings

Construction adhesives and wood glues will bond boards well. Follow the adhesive manufacturer's instructions for application processes. Screw and nail joints should be pre-drilled to avoid splitting particularly near the edge.

MACHINABLE PCB

Fab Lab Tulsa

For:

Circuit Board
Design

Machine:

Desktop CNC

Thickness:

.062"



Material Profile

Description

FR1 copper clad laminated sheet

Design Notes

FR1 has a TG (glass transition temperature) of 130-degrees

Typical Uses

Machinable PCB can be used to create circuit boards