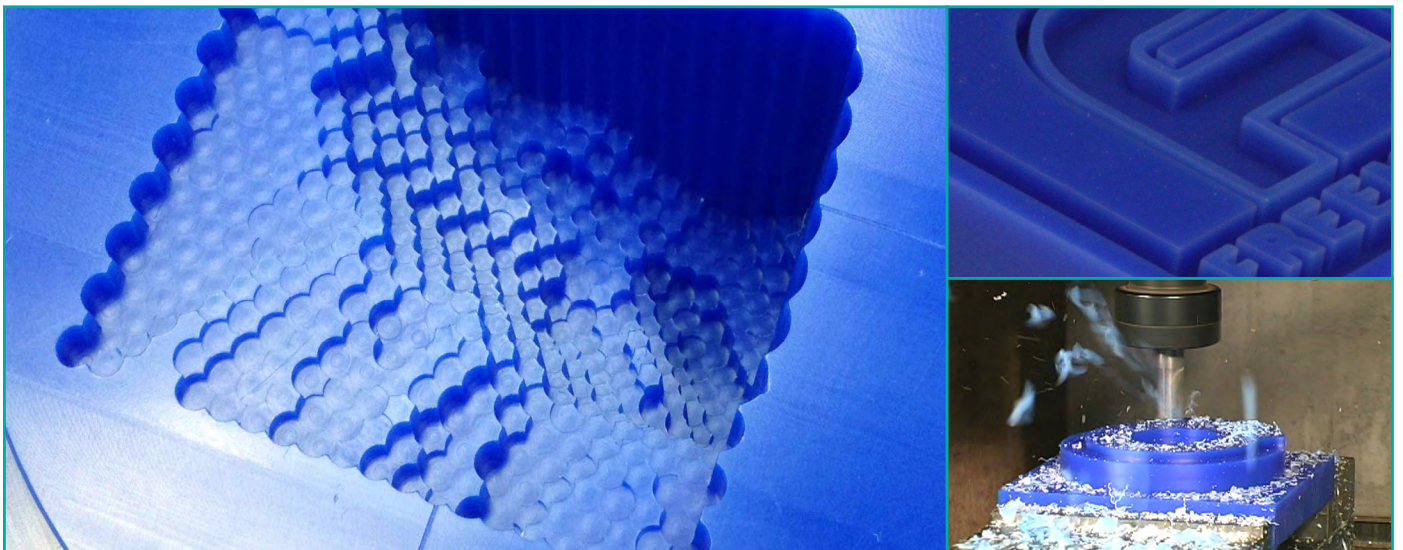


MACHINABLE WAX

Formulated and manufactured by Freeman, this extremely hard, synthetic material machines faster than polyurethane and epoxy tooling boards or metals without sacrificing quality of finish, surface detail, or dimensional accuracy.

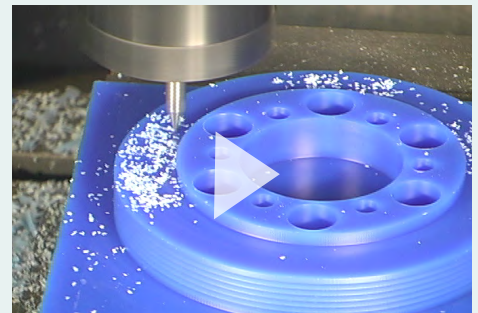
Machinable Wax features a combination of properties unique to the tooling and prototyping world. Most notable is its non-abrasive, self-lubricating, and self-releasing characteristics, which make it an ideal material for many challenging applications.



DID YOU KNOW?

We have a Machinable Wax video ready to watch!

Our Video Library is available on our website, www.FreemanSupply.com, or on our YouTube channel [@freemanmfg](https://www.youtube.com/@freemanmfg). We feature over three hours of instructional and product videos, offering the most comprehensive free resource for the making of parts, patterns, tools and molds. We also have all our videos available for purchase on **eBay**! Start watching today!



FREEMAN MACHINABLE WAX

Standard and custom sizes are available in **three formulations**: the original, industry-standard **Blue**, the economical, user-friendly **Purple**, and the refined and enhanced **Turquoise**.



What is Machinable Wax?

Qualities

Non-abrasive

Unlike metal and tooling boards that can cause significant wear on cutting tools.

User-friendly

Machining produces chips instead of dust for a cleaner work environment.

Self-releasing/self-sealing

Pour liquid tooling plastics (including epoxy, urethane and silicone rubber) into Machinable Wax without requiring the use of sealers or release agents.

Able to be glued

Produces large or irregularly-shaped pieces for machining with the use of 3M #90 Spray Adhesive (page 3).

Self-lubricating

Enables all machining operations to be performed without the need for coolants or cutting fluids.

Wide variety of sizes

Eliminates the waste associated with using large tooling boards for smaller projects.

Applications

- **Molds and prototypes:** creates accurate reproductions
- **Education:** as a training aid and project material
- **CNC:** demonstrations or proofing machining programs
- **Medical/Dental:** molds for proton therapy or dental work

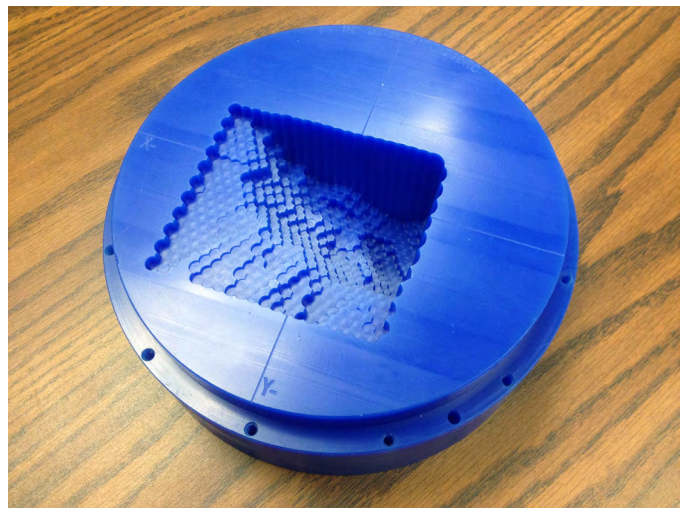
Machining guidelines

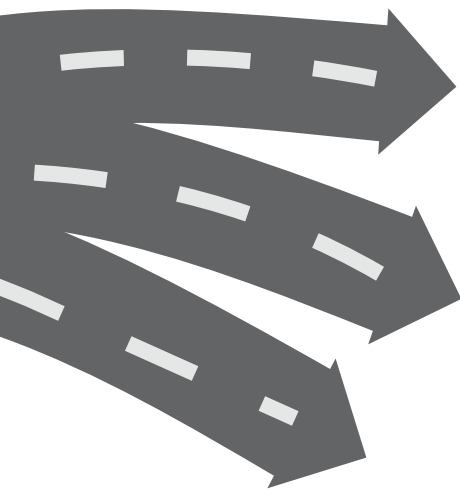
	Spindle Speed	Feed Rate
Roughing	3,000 rpm	100 in./min.
Finishing	8,000-10,000 rpm	40-100 in./min.

Data obtained using a 1/2" ball end mill

Calculating weight

$$\frac{L \times W \times \text{Thickness (inches)}}{28.8} = \text{Weight (lb.)}$$

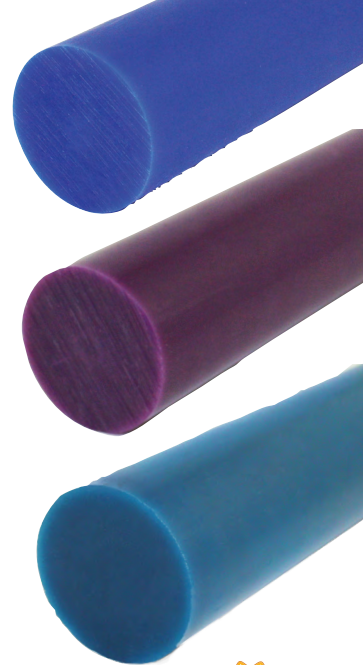




Which one is right for me?

Each batch is manufactured to the highest standards in world-class facilities with high-quality ingredients while still keeping your budget in mind. With competitive prices and excellent results, you'll find no better match for your project.

	Blue	Purple	Turquoise
Hardness (Shore D)	50-55	52	56
Surface Finish	Excellent	Good	Excellent
Fine Detail	Good	Fair	Excellent
Proofing	Excellent	Excellent	Excellent
Flexibility	Excellent	Excellent	Good
Thin-Walled Sections	Good	Good	Excellent



Original Classic Blue

This tried-and-true wax has been the industry-standard for over 30 years. It performs exceptionally well on the CNC or when carving by hand.

Economical Purple

Ideal for educational training programs or testing, this wax undergoes the same quality standards as the other formulations while being budget-friendly.

Enhanced Turquoise **NEW!**

This premium wax is ideal for applications where a high level of detail and accuracy is needed whether working by hand or machine.

ACCESSORIES

3M™ Hi-Strength 90 Spray Adhesive

High Strength 90 Adhesive bonds **SKU** **Mfg. No.** **Net weight (lb.)**
to concrete, wood, MDF, laminates, 054515 30023-3 24 fl. oz.
polyethylene and more. Its extreme high-strength and fast-tack adhesive provides strong permanent bond. Ideal adhesive for machinable wax. It offers a one-minute dry time for fast, extremely strong permanent results and high productivity.



To order any of these products, please see our website, www.FreemanSupply.com, for complete details and part numbers. You can also contact our Customer Service department at (800) 821-3511 opt. 3.

MASTER PROTOWAX

This unique machinable investment casting wax is perfect for prototype work or even short-run part requirements. Please see our website, www.FreemanSupply.com or contact Customer Service for complete details.

- ▶ Easily turned, milled, drilled, tapped, and carved faster than metal without any tool wear
- ▶ Excellent stability and low expansion rate virtually eliminate investment shell cracking problems
- ▶ Available in blocks up to 5" thick, and cylinders from 2" to 8.5" in diameter up to 12" long; custom sizes available



Specifications

Color	Specific Gravity	Ash Content	Hardness (Shore D)	Softening Point	Volumetric Shrinkage @ Room Temp.	Viscosity @ 160°F (CPS)
Red	0.94	0.010%	43	157°F	7%	30

LOCATIONS

Branch Locations and Public Warehouses

Freeman has strategically placed satellite locations across North America with customer service representatives ready to help. Thousands of products are stocked at these locations as well as public warehouses to reduce your shipping costs.

Strategic & Effective Stocking

Freeman's inventory staff constantly monitors sales and stocking data across the country to properly provide the right amount of products at each location.

Worldwide Shipping

Freeman ships orders all across the globe and has various international distributors available to supply customers with top-quality products.



OHIO (HEADQUARTERS)

1101 Moore Road
Avon, OH 44011
TEL 800-321-8511
TEL 440-934-1902
FAX 440-934-7200

KANSAS

Garvey Warehouse
5755 S. Hoover Road Bldg. #5
Wichita, KS 67215
TEL 800-792-1047
FAX 817-568-0908

ONTARIO

FiFo Logistics
3600B Laird Road Unit 8
Mississauga, ON L5L 6A7
TEL 800-345-9259
FAX 586-774-1019

QUEBEC

3475 boul Pitfield
Montreal, QC H4S 1H3
TEL 800-263-7699
TEL 514-335-3530
FAX 514-335-3225

CALIFORNIA

MWave
20153 Paseo del Prado
Walnut, CA 91789
TEL 800-325-2100
FAX 440-934-7200

MICHIGAN

27655 Groesbeck Highway
Roseville, MI 48066
TEL 800-345-9259
TEL 586-774-1210
FAX 586-774-1019

OREGON

Terminal Transfer Inc.
15745 N. Lombard St., Ste. 100
Portland, OR 97203
TEL 800-558-0866
FAX 262-789-5407

TEXAS

3152 S.E. Loop 820
Fort Worth, TX 76140
TEL 800-792-1047
TEL 817-551-7301
FAX 817-568-0908

GEORGIA

Shippers Warehouse
of Georgia
9250 S. Main Street
Jonesboro, GA 30236
TEL 800-445-0811
FAX 440-934-7200

NORTH CAROLINA

PSC International
101 Bailey Street
Mocksville, NC 27028
TEL 800-321-8511
FAX 440-934-7200

PENNSYLVANIA

909 Strickler Rd.
Mt. Joy, PA 17552
TEL 800-631-4230
TEL 717-653-5300
FAX 717-653-7372

WISCONSIN

4921 South 2nd St.
Milwaukee, WI 53207
TEL 800-558-0866
TEL 262-789-9800
FAX 262-789-5407

TERMS & CONDITIONS

Returned Goods

To save transportation charges, and facilitate handling of merchandise upon our receipt, we request that no merchandise be returned without prior written authorization.

Damaged Goods

Merchandise given to a transportation firm is their responsibility to deliver in satisfactory condition. If merchandise is delivered damaged, the customer should note as such on freight bill and file a claim with the delivering carrier. Regulations require that hidden damage, identified upon unpacking, must be reported within ten (10) days of delivery in order to file a proper claim.

Liability/Warranty Statement

Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty or merchantability or fitness, nor is protection from any law of patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental, or consequential damages.

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