



# FREEMAN MACHINABLE WAX



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

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

## WHICH WAX 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 better results, you'll find no better match for your project.

### ORIGINAL 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

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

## 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

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

28.8

## Specifications

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

For part numbers, technical documents, and ordering, visit our website at [www.FreemanSupply.com](http://www.FreemanSupply.com).



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# ABOUT FREEMAN MANUFACTURING & SUPPLY CO.

Freeman is North America's extensive composites manufacturing materials supplier offering a comprehensive selection of fiberglass and carbon fabric, resins, releases, vacuum-bagging materials, and high-temperature tooling boards. Freeman's 13 locations across North America and dedicated technical team allows for high-quality products and service.

## BRANCH LOCATIONS & 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 SYSTEMS

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.



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## TERMS & CONDITIONS

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