

**Section 1 Identification**

**Product identifiers**

Product name: Protowax

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Specialty tooling wax, machinable investment casting wax

**Details of the supplier of the safety data sheet**

Freeman Manufacturing and Supply Company  
 1101 Moore Road, Avon, OH 44011  
 (440) 934-1902  
 contactus@freemansupply.com

**1.4 Emergency telephone number**  
 CHEMTREC (800) 424-9300

**Section 2 Hazards Identification**

**Classification of the substance or mixture**

Not a hazardous substance or mixture.

**GHS Label elements, including precautionary statements**

Not a hazardous substance or mixture.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

**Mixture**

Proprietary mixture of synthetic and natural waxes, resins, and oil soluble dyes.  
 No ingredients are hazardous according to OSHA criteria.  
 No components need to be disclosed as per 29CFR Part 1910.1200.

**Section 4 First Aid Measures**

**Description of first aid measures**

**Inhalation** Get medical assistance if irritation develops or persists. If breathing is difficult, move the person to fresh air. Give artificial respiration if person is not breathing.

**Skin contact** For thermal burns, flush or submerge effected area in cold water to dissipate heat. Cover with clean bandage material. Do not peel material from skin. Get medical attention.

**Eye contact** For contact at ambient temperatures, wash with soap and water. Immediately flush with plenty of water for at least 15 minutes. If irritation persists, get medical attention immediately.

**Ingestion** If swallowed, rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician if necessary.

**Section 5 Fire-Fighting Measures**

**Extinguishing media**

**Suitable extinguishing media:** Water fog, dry chemical, foam, carbon dioxide.  
**Unsuitable extinguishing media:** Do not use a solid water stream as it may scatter and spread fire.

**Special hazards arising from the substance or mixture**

**Unusual Fire and Explosion Hazards:** None known.  
**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, irritating smoke.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes. Avoid breathing vapors, mist or gas. Wear appropriate personal protective equipment, see Section 8.

**Environmental precautions**

Should not be released into the environment. Prevent product from entering drains.

**Methods and materials for containment and cleaning up**

Contain spillage and use clean non-sparking tools to collect material.  
 Shovel spillage into suitable container for disposal.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Use normal precautions when handling hot molten liquid solutions. Do not breathe fumes or vapor from heated material. Do not allow hot material to contact skin. Provide appropriate exhaust ventilation at places where dust is formed. Try to avoid creating dust.

**Conditions for safe storage, including any incompatibilities**

Store at ambient temperatures. Keep away from ignition sources, heat, open flames, and direct sunlight. Do not store with incompatible materials, see Section 10.

**Section 8 Exposure Controls/Personal Protection**

**Control parameters**

**Exposure Limits/Guideline**

Substance Name	Limit / Standard	Source
Wax fumes	2 mg/m <sup>3</sup> TWA	ACGIH

**Exposure controls**

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, very hot processing, mechanical generation of dusts, etc.

**Personal protective equipment**

**Eye/Face**

Wear safety glasses equipped with side shields, or safety goggles. Use a full-face shield and safety glasses if handling heated material.

**Hands**

Wear thermally resistant gloves and long sleeves if handling molten product.

**Skin/Body**

Prevent skin contact, wear long sleeves and/or coveralls.

**Respiratory**

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, use an air-purifying respirator. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Safety Stations**

Make emergency eyewash stations and washing facilities available in work area.

**General Hygienic Practices**

Avoid breathing dust, vapor or mist. Wash thoroughly after handling. Remove contaminated clothing promptly and clean thoroughly before reuse. Avoid contamination of food, beverages, or smoking.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Red solid
<b>Odor</b>	None to slight petroleum
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point</b>	Approximately 151°F
<b>Initial boiling point</b>	No data available
<b>Flash point (COC)</b>	465°F (240°C)
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/Lower flammability</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density (g/cc)</b>	0.90 ± 0.05
<b>Water solubility</b>	Insoluble
<b>Coefficient: n-octanol/ water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Viscosity</b>	Solid at room temperature
<b>Explosive properties</b>	None
<b>Oxidizing properties</b>	None
<b>% Volatile</b>	0

**Section 10 Stability and Reactivity**

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Heat, sparks, open flame. Avoid dust formation.
<b>Incompatible materials:</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	In case of fire hazardous decomposition products may be produced: carbon monoxide, carbon dioxide, irritating smoke.

**Section 11 Toxicological Information**

<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	No data available
<b>Inhalation</b>	Wax fumes have been reported to be irritating to the respiratory tract, especially to sensitized persons.
<b>Dermal</b>	Molten product will cause thermal burns on contact
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	Molten product will cause thermal burns on contact
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
<b>Reproductive toxicity</b>	No data available
<b>STOT - single exposure</b>	No data available
<b>STOT - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available

**Section 12 Ecological Information**

<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

<b>Disposal</b>	Follow applicable Federal, state, and local regulations.
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**Section 14 Transport Information**

<b>DOT, TDG, IMO/IMDG, IATA/ICAO:</b>	Not regulated
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**Section 15 Regulatory Information**

**U.S. Federal Regulations**

EPCRA Section 302: This material contains no extremely hazardous substances.  
 SARA 311/312 Codes: No hazard categories identified  
 SARA 313: No components were identified  
 TSCA Inventory Status: All components of this product are listed or exempted from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

**U.S. State Regulations**

This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

**Section 16 Other Information**

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