

**Section 1 Identification**

**1.1 Product identifiers**

Optical Soluble Wax, Optical Soluble Beads

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

Investment casting, temporary adhesive. For professional use only.

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

Freeman Manufacturing & Supply Company

1101 Moore Road

Avon, OH 44011-4043 USA

Telephone: +1 800-321-8511

Email: contactus@freemansupply.com

**1.4 Emergency 24-hour telephone number**

CHEMTREC (800) 424-9300

**Section 2 Hazards Identification**

**2.1 Classification of the substance or mixture**

Not classified as a hazardous substance or mixture according to OSHA 29 CFR 1910.1200 HCS

**2.2 Label elements**

No label element(s) required

**2.3 Hazards not otherwise classified**

Molten product can cause serious burns.

**Section 3 Composition/Information on Ingredients**

**3.1 Mixture of Substances**

Proprietary mixture of synthetic waxes. No hazardous ingredients.

No components need to be disclosed according to the applicable regulations.

**Section 4 First Aid Measures**

**4.1 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.

For contact at ambient temperatures, wash with soap and water.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes.

If irritation persists, get medical attention immediately, preferably an ophthalmologist.

**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.

**4.2 Most important symptoms and effects, both acute and delayed**

None known

**4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically

**Section 5 Fire Fighting Measures**

**5.1 Extinguishing media**

**Suitable extinguishing media:** Water fog or fine spray, or foam.

**Unsuitable extinguishing media:** Do not use dry powder, carbon dioxide, or high volume water jet.

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### Section 5 Fire Fighting Measures

#### 5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards:** Product is a waxy solid and is not expected to form dust. Organic dusts at sufficient concentration may form explosive mixtures in air. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, nitrogen oxides, irritating smoke

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### Section 6 Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear appropriate personal protective equipment.

#### 6.2 Environmental precautions

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

#### 6.3 Methods and materials for containment and cleaning up

Do not walk through spilled material. Contain spillage and use clean non-sparking tools to collect material. Shovel spillage into suitable container for disposal. Flush any residue with water.

### Section 7 Handling and Storage

#### 7.1 Precautions for safe handling

Do not heat material above 200°F. Do not breathe vapors/dust. Do not get in eyes or mouth or on skin. Keep away from sources of ignition. Use normal precautions when handling hot molten liquid solutions. Avoid creating dust. Provide appropriate exhaust ventilation.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store at temperatures not exceeding 30°C (86°F) in closed containers. Avoid prolonged exposure to heat or air. Keep away from flame and sources of ignition. See Section 10 for incompatibilities.

### Section 8 Exposure Controls/Personal Protection

#### 8.1 Control parameters

**Exposure Limits/Guidelines:** Not established

#### 8.2 Exposure controls

**Appropriate engineering controls:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. 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.

#### 8.3 Personal protective equipment

**Eye/Face:** Use a full-face shield and safety glasses if handling heated material. With product at ambient temperatures, use safety glasses equipped with side shields.

**Hands:** Use gloves chemically resistant to this material when prolonged or frequent repeated contact could occur. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Examples of preferred glove barrier materials include: neoprene, polyvinyl chloride (PVC) or butyl rubber gloves. When handling product at elevated temperatures, use heat-resistant gloves.

**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 N95 dust mask for limited exposure. For prolonged exposure 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.

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## Section 8 Exposure Controls/Personal Protection

### Safety Stations

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

### General Hygienic Practices

Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

Avoid breathing dust, vapor or mist.

## Section 9 Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Physical State:</b>	Translucent waxy solid
<b>Color:</b>	White to light yellow
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	No data available
<b>pH:</b>	4.0-8.0
<b>Melting Point:</b>	>144°F (>62°C)
<b>Boiling Point:</b>	>200°F (>93°C)
<b>Decomposition Temperature:</b>	No data available
<b>Flash Point:</b>	Approximately 475°F (246°C)
<b>Flammability:</b>	Not ignitable
<b>Lower Explosion Limit:</b>	No data available
<b>Upper Explosion Limit:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Specific Gravity:</b>	1.4
<b>Water Solubility:</b>	72% at 68°F (20°C) <i>Estimated</i>
<b>Partition Coefficient: n-octanol/water:</b>	No data available
<b>Autoignition Temperature:</b>	No data available
<b>Viscosity:</b>	Solid at room temperature

## Section 10 Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

### 10.4 Conditions to avoid

Do not heat material above 200°F. Avoid heat, sparks, open flame. Avoid dust formation.

### 10.5 Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes, alcohols, ethers, carbon dioxide, carbon monoxide, carboxylic acids, nitrogen oxides, polymer fragments

## Section 11 Toxicological Information

### 11.1 Information on toxicological effects

**Acute toxicity:** Harmful effects not anticipated

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### Section 11 Toxicological Information

**Skin Corrosion/Irritation:** Prolonged exposure not likely to cause significant skin irritation.  
**Serious Eye Damage/Eye Irritation:** Fumes or dust may cause slight temporary eye irritation.  
**Respiratory or Skin Sensitization:** No data available  
**Germ Cell Mutagenicity:** No data available  
**Reproductive Toxicity:** Classification criteria not met  
**Carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA.  
**Specific Target Organ Toxicity (STOT), Single Exposure:** No data available  
**STOT, Repeated Exposure:** Not anticipated to cause significant adverse effects.  
**Aspiration Hazard:** Classification criteria not met

#### 11.2 Information on other hazards

**Endocrine disrupting properties:** This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### Section 12 Ecological Information

#### 12.1 Ecotoxicity

No data available

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT & vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### Section 13 Disposal Considerations

#### 13.1 Disposal

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. This material is a combustible powder and has the potential to form explosive dust air mixtures. Take precautions to guard against the formation of dust clouds during incineration.

### Section 14 Transport Information

#### 14.1 to 14.5 DOT, IMDG, IATA

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Maritime transport in bulk according to IMO instruments

Consult IMO regulations before transporting ocean bulk

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## Section 15 Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the product

**Inventories:** This product complies with the following inventories: USA TSCA

**EPCRA Superfund Amendments and Reauthorization Act (SARA) Title III, Section 302 Components:**

No chemicals in this material are subject to the reporting requirements.

**SARA Section 311/312 Hazards Classifications:** None

**SARA Section 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**RCRA:** In the form delivered, this product is not considered as hazardous waste, and is not subject to reporting under the Resource Conservation and Recovery Act.

**California Proposition 65:** ⚠️ WARNING: This product may expose you to chemicals including acetaldehyde, which is known to the State of California to cause cancer.

For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical Name	CAS Number	Concentration (%)	No Significant Risk Level (NSRL)
Acetaldehyde	75-07-0	<0.01	90 µg/day (Inhalation)

## Section 16 Other Information

### 16.1 Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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