

### Section 1 Chemical Product and Company Identification

#### 1.1 Product identifiers

Product name: Freeman PM Beads 866 Blue

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

Identified uses: Jewelry Injection Wax

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

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

#### 1.4 Emergency telephone numbers

CHEMTREC (800) 424-9300  
+31 (0)72 5750600

### Section 2 Hazards Identification

#### 2.1 Classification of the substance or mixture

Not classified according to OSHA 29 CFR 1910.1200 HCS or EC No 1907/2006 (REACH)

#### 2.2 GHS Label elements, including precautionary statements

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, resins, polymers, and oil soluble dye(s).  
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.

**Eye contact** For contact at ambient temperatures, wash with soap and water. Immediately flush with plenty of water for at least 20 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. Seek medical attention.

### Section 5 Fire Fighting Measures

#### 5.1 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.

#### 5.2 Special exposure hazards

Incomplete combustion or high temperature cracking can release carbon monoxide, organic acids, aldehydes, alcohols, irritating vapours, smoke, and other products of incomplete combustion. Complete combustion yields water and carbon dioxide.

#### 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

Prevent inhalation of vapours when heated. Avoid contact with hot liquid product. Wear appropriate personal protective equipment, see Section 8.

#### 6.2 Environmental precautions

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

## Freeman PM Beads 866 Blue

### Section 6 Accidental Release Measures

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

Do not walk through spilled material. Allow molten product to cool. Contain spillage and use clean non-sparking tools to collect material. Shovel spillage into suitable container for disposal.

### Section 7 Handling and Storage

#### 7.1 Precautions for safe handling

Wear appropriate personal protective equipment, see Section 8. Avoid contact with skin and eyes. Wash thoroughly with soap and water after handling. Do not use in areas without adequate ventilation. Avoid breathing fumes. Avoid dust formation. Avoid contact with molten material.

**Specific end use(s):** Avoid heating above 100°C (212°F) during the normal investment casting process (except dewax operations). Do not let molten product stand in melt tanks and injection machines, stir product continuously.

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

Store at ambient temperatures. Avoid temperatures above 86°F (30°C). Store covered. 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

#### 8.1 Control parameters

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

#### 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 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:** Wear safety glasses equipped with side shields, or safety goggles.

**Skin:** Chemical protective gloves should not be needed when handling this material. Use gloves with insulation for thermal protection when needed. Wear clean body-covering clothing.

**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, or when adverse effects such as respiratory irritation has been experienced, or where indicated by your risk assessment process, then use an approved air-purifying respirator. Use an approved air-purifying respirator with organic vapor cartridge and particulate pre-filter when vapors are generated at increased temperatures.

**Safety Stations:** Make emergency eyewash stations and washing facilities available in work area.

**General Hygienic Practices:** Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse. Avoid contamination of food, beverages, or smoking

### Section 9 Physical and Chemical Properties

#### 9.1 Information on basic physical and chemical properties

<b>Physical State</b>	Solid	<b>Upper/Lower Flammability</b>	No data available
<b>Color</b>	Blue	<b>Vapor Pressure</b>	No data available
<b>Odor</b>	Mild	<b>Vapor Density</b>	No data available
<b>Odor Threshold</b>	No data available	<b>Relative Density (g/cc)</b>	0.89 – 0.96
<b>pH</b>	No data available	<b>Water Solubility</b>	Negligible
<b>Melting Point</b>	>160°F (71°C)	<b>Coefficient: n-octanol/ water</b>	No data available
<b>VOC Content</b>	0	<b>Auto-Ignition Temperature</b>	No data available
<b>Boiling Point</b>	No data available	<b>Viscosity</b>	Approx. 95 cP at 100°C
<b>Flash Point</b>	>374°F (190°C)	<b>Explosive Properties</b>	None
<b>Evaporation rate</b>	No data available	<b>Oxidizing Properties</b>	None
<b>Flammability</b>	Flammable		

### Section 10 Stability and Reactivity

<b>10.1 Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>10.2 Chemical stability:</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.

## Freeman PM Beads 866 Blue

### Section 10 Stability and Reactivity

<b>10.4 Conditions to avoid:</b>	Heat, sparks, open flame. Avoid dust formation.
<b>10.5 Incompatible materials:</b>	Strong acids and oxidizing agents.
<b>10.6 Hazardous decomposition products:</b>	May include: carbon monoxide, carbon dioxide. See section 5.

### Section 11 Toxicological Information

#### 11.1 Information on likely routes of exposure

<b>Acute Toxicity</b>	Non-toxic in normal conditions of use.
<b>Skin Corrosion/Irritation</b>	No skin reabsorbing properties are known.
<b>Serious Eye Damage/Eye Irritation</b>	Classification criteria not met.
<b>Respiratory or Skin Sensitization</b>	No allergic properties are known.
<b>Germ Cell Mutagenicity</b>	Classification criteria not met.
<b>Carcinogenicity</b>	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.
<b>Reproductive Toxicity</b>	Classification criteria not met.
<b>Aspiration Hazard</b>	Not relevant.
<b>Specific Target Organ Toxicity (STOT)</b>	
<b>Single Exposure</b>	Not expected.
<b>Repeated Exposure</b>	No data available.

### Section 12 Ecological Information

<b>12.1 Toxicity</b>	Not soluble in water. Not expected to be harmful to aquatic organisms
<b>12.2 Persistence and degradability</b>	No data available
<b>12.3 Bioaccumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 Results of PBT &amp; vPvB assessment</b>	No data available

### Section 13 Disposal Considerations

<b>13.1 Disposal</b>	Follow applicable Federal, State, and local regulations.
----------------------	--

### Section 14 Transport Information

<b>14.1 DOT, TDG, IMO/IMDG, IATA/ICOA:</b>	Not regulated
--	---------------

### Section 15 Regulatory Information

<b>15.1 Safety, health and environmental regulations/legislation specific for the product</b>
This product is not classified as hazardous

### 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.

Issue Date: June 1, 2015  
Revision Date: August 3, 2022