

Section 1 Chemical Product and Company Identification

1.1 Product identifiers

Product name: Freeman PM Beads 864 Red

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, ester waxes, 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.

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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 ³ 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

Physical State	Solid	Upper/Lower Flammability	No data available
Color	Red	Vapor Pressure	No data available
Odor	Mild	Vapor Density	No data available
Odor Threshold	No data available	Relative Density (g/cc)	0.89 - 0.96
pH	No data available	Water Solubility	Negligible
Melting Point	>160°F (71°C)	Coefficient: n-octanol/ water	No data available
VOC Content	0	Auto-Ignition Temperature	No data available
Boiling Point	No data available	Viscosity	Approx. 73 cP at 100°C
Flash Point	>374°F (190°C)	Explosive Properties	None
Evaporation rate	No data available	Oxidizing Properties	None
Flammability	Flammable		

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:

Hazardous polymerization does not occur.

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Section 10 Stability and Reactivity

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

Section 11 Toxicological Information

11.1 Information on likely routes of exposure

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

Section 12 Ecological Information

12.1 Toxicity	Not soluble in water. Not expected to be harmful to aquatic organisms
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	No data available

Section 13 Disposal Considerations

13.1 Disposal	Follow applicable Federal, State, and local regulations.
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Section 14 Transport Information

14.1 DOT, TDG, IMO/IMDG, IATA/ICOA:	Not regulated
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Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the product	This product is not classified as hazardous
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Section 16 Other Information

16.1 Disclaimer

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