



Ferris[®] Beads 1737 Medium Blue

Section 1 Chemical Product and Company Identification

1.1 Product identifiers

Product name: Ferris[®] Beads 1737 Medium 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 www.freemansupply.com

1.4 Emergency telephone number CHEMTREC (800) 424-9300

Section 2 Hazards Identification

2.1 Classification of the substance or mixture

Not classified according to OSHA 29 CFR 1910.1200 HCS 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, resin(s), additive(s), 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

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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.

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 hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. See Section 10 for possible products of hazardous combustion.

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, see Section 8. 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. Avoid dust formation. 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. Keep in closed container when not in use. 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/m³ 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 **Eve/Face** Wear safety glasses equipped with side shields, or safety goggles. Hands Chemical protective gloves should not be needed when handling this material. Use gloves to protect from mechanical injury. Use gloves with insulation for thermal protection when needed. Skin/Body No precautions other than clean body-covering clothing should be needed. 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 evewash 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 Ph	ysical and Chemical Properties		
9.1 Information on basic physical and chemical pro	oportion		
Physical State	Solid		
Color	Medium Blue		
Odor	Mild, sweet No data available No data available >153°F (>67°C)		
Odor Threshold			
рН			
Melting Point			
VOC Content	0		
Boiling Point	No data available		
Flash Point	465°F (240°C)		
Evaporation rate	No data available		
Flammability (solid, gas)	No data available		
Upper/lower flammability	No data available		
Vapor Pressure	No data available		
Vapor Density	No data available		
Relative Density (g/cc)	0.9 ± 0.05		
Water Solubility			
	Negligible No data available		
Coefficient: n-octanol/ water			
Auto-Ignition Temperature	No data available		
Viscosity	Solid at room temperature None None		
Explosive Properties			
Oxidizing Properties			
Section	10 Stability and Reactivity		
Section			
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.		
10.4 Conditions to avoid:	Heat, sparks, open flame. Avoid dust formation.		
10.5 Incompatible materials:	Strong oxidizing agents.		
10.6 Hazardous decomposition products	May include: carbon monoxide, carbon dioxide		
Control A			
Section 1	1 Toxicological Information		
11.1 Information on likely routes of exposure	Eye contact, skin contact, ingestion		
Acute Oral Toxicity	Very low toxicity if swallowed. Harmful effects not anticipated		
neute of all longity	from swallowing small amounts.		
Acuto Dormal Tovicity	No adverse effects anticipated from skin absorption.		
Acute Dermal Toxicity			
Acute Inhalation Toxicity	Vapors released during thermal processing may cause		
	respiratory irritation.		
Skin Corrosion/Irritation	Classification criteria not met		
Serious Eye Damage/Eye Irritation	Classification criteria not met		
Respiratory or Skin Sensitization	Classification criteria not met		
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		
Single Exposure Repeated Exposure	Not expected No data available		

city istence and degradabili ccumulative potential lity in soil lts of PBT & vPvB assess	sment	No data available No data available No data available No data available	nful to aquatic organisms				
	Section 13	2 Dienocal Considerations					
aal	Section 13 Disposal Considerations						
osal		Follow applicable Fede	eral, State, and local regulations.				
	Section 1	14 Transport Information					
TDG, IMO/IMDG, IATA/	/ICOA:	Not regulated					
	Section 1	5 Regulatory Information					
nder the Resource Conser Alifornia Proposition 65	vation and Recover	ry Act. s product may expose you to	o chemicals including alpha-Methylstyren				
	Continu	n 16 Other Information					
APRESSED OR IMPLIED, II JRPOSE. No statements h rcumstances shall Seller b reach of warranty, strict o le liability for any claims ust be confirmed by Buye ad is therefore not recomm	NCLUDING ANY WA herein are to be cons be liable for inciden of liability arising in shall be Buyer's pur er by testing for its i mended for, uses for uses for which imp	ARRANTY OF MERCHANTAE strued as inducements to in- ital, consequential or indirec connection with the produc inchase price. Data and resu intended conditions of use. ' or which prolonged contact w	BILITY OR FITNESS FOR A PARTICULAR fringe any relevant patent. Under no ct damages for alleged negligence, ct(s). Buyer's sole remedy and Seller's ilts are based on controlled lab work and The product(s) has not been tested for, with mucous membranes, abraded skin,				
	y, health and environm ventories: This product RA 311/312 Hazards C RA 313 Components: T ceed the threshold (De M RA: In the form delivere der the Resource Conser lifornia Proposition 65 hich is known to the State Chemical Name alpha-Methylstyrene alpha-Methylstyrene e following supersedes E PRESSED OR IMPLIED, I RPOSE. No statements h cumstances shall Seller h each of warranty, strict o le liability for any claims ust be confirmed by Buyed d is therefore not recomp blood is intended; or for sue Date: June 1, 2015	y, health and environmental regulations/ ventories: This product complies with the f RA 311/312 Hazards Classifications: Nor RA 313 Components: This material does n ceed the threshold (De Minimis) reporting lo CRA: In the form delivered, this product is no der the Resource Conservation and Recover lifornia Proposition 65: A WARNING: This nich is known to the State of California to cau Chemical Name CAS Number alpha-Methylstyrene 98-83-9 Section Amer e following supersedes Buyer's documents. PRESSED OR IMPLIED, INCLUDING ANY WA IRPOSE. No statements herein are to be con rounstances shall Seller be liable for inciden each of warranty, strict of liability arising in le liability for any claims shall be Buyer's pu ust be confirmed by Buyer by testing for its i d is therefore not recommended for, uses fo blood is intended; or for uses for which imp sue Date: June 1, 2015	Section 15 Regulatory Information y, health and environmental regulations/legislation specific for the ventories: This product complies with the following inventories: Canad RA 311/312 Hazards Classifications: None RA 313 Components: This material does not contain any chemical con ceed the threshold (De Minimis) reporting levels established by SARA T CRA: In the form delivered, this product is not considered as hazardous of der the Resource Conservation and Recovery Act. lifornia Proposition 65: ▲ WARNING: This product may expose you to thich is known to the State of California to cause cancer. For more inform Chemical Name CAS Number Chemical Name CAS Number Section 16 Other Information Aimer e following supersedes Buyer's documents. SELLER MAKES NO REPRE PRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTAFI RPOSE. No statements herein are to be construed as inducements to in custances shall Seller be liable for incidental, consequential or indirect each of warranty, strict of liability arising in connection with the product le liability for any claims shall be Buyer's purchase price. Data and resu ust be confirmed by Buyer by testing for its intended conditions of use. d is therefore not recommended for, uses for which prolonged contact v blood is intended; or for u				