



Ferris[®] Beads 4626 Dark Blue

Section 1 Chemical Product and Company Identification

1.1 Product identifiers Product name: Ferris[®] Beads 4626 Dark 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 1.4 Emergency telephone number Telephone (440) 934-1902 CHEMTREC (800) 424-9300 www.freemansupply.com 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 and natural 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 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. For thermal burns, flush or submerge effected area in cold water to dissipate heat. Skin contact 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 Physical and Chemical Properties | | | | |
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| 0.1 Information on basis abusisal and shomized are | onortion | | | |
| 9.1 Information on basic physical and chemical pro | Solid | | | |
| Physical State | Dark blue | | | |
| Color | Mild | | | |
| Odor | | | | |
| Odor Threshold | No data available | | | |
| pH | No data available | | | |
| Melting Point | >151°F (66°C) | | | |
| 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 | | | |
| Coefficient: n-octanol/ water | No data available | | | |
| Auto-Ignition Temperature | No data available | | | |
| Viscosity | Solid at room temperature None | | | |
| Explosive Properties | | | | |
| Oxidizing Properties | None | | | |
| onulling roperties | Tone | | | |
| Section | 10 Stability and Reactivity | | | |
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| 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 | | | |
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| Section 11 | 1 Toxicological Information | | | |
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| 11.1 Information on likely routes of exposure | Eye contact, skin contact, ingestion | | | |
| | Eye contact, skin contact, ingestion Very low toxicity if swallowed. Harmful effects not anticipated | | | |
| 11.1 Information on likely routes of exposure Acute Oral Toxicity | Eye contact, skin contact, ingestion Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. | | | |
| 11.1 Information on likely routes of exposure Acute Oral Toxicity Acute Dermal Toxicity | Eye contact, skin contact, ingestion Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. No adverse effects anticipated from skin absorption. | | | |
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| 11.1 Information on likely routes of exposure Acute Oral Toxicity Acute Dermal Toxicity Acute Inhalation Toxicity Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Respiratory or Skin Sensitization Germ Cell Mutagenicity | Eye contact, skin contact, ingestion Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. No adverse effects anticipated from skin absorption. Vapors released during thermal processing may cause respiratory irritation. Classification criteria not met Classification criteria not met Classification criteria not met Classification criteria not met | | | |
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| | Section | 12 Ecological Information | | |
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| 2.1 Toxicity 2.2 Persistence and degradab 2.3 Bioaccumulative potential 2.4 Mobility in soil 2.5 Results of PBT & vPvB ass | | Not expected to be harr No data available No data available No data available No data available No data available | nful to aquatic organisms | |
| | Section 1 | 3 Disposal Considerations | | |
| l Disposal | | Follow applicable Fede | Follow applicable Federal, State, and local regulations. | |
| | Section 1 | 4 Transport Information | | |
| 1 DOT, TDG, IMO/IMDG, IATA/ICOA: | | Not regulated | Not regulated | |
| | Section 1 | 5 Regulatory Information | | |
| | 65: <u> WARNING</u> : Thi hich is known to the St | is product may expose you t tate of California to cause ca | | |
| alpha-Methylstyrene | 98-83-9 | <0.03 (estimated) | Not established | |
| | Section | n 16 Other Information | | |
| EXPRESSED OR IMPLIED |), INCLUDING ANY WA | ARRANTY OF MERCHANTA | SENTATION OR WARRANTY, BILITY OR FITNESS FOR A PARTICULAR fringe any relevant patent. Under no | |