

### Section 1 Identification

**Product name:** Mia 82 Aluminum Powder  
**Recommended use:** Filler  
**Details of the supplier of the safety data sheet:**  
 Freeman Manufacturing and Supply Company  
 1101 Moore Road, Avon, OH 44011  
 Phone (440) 934-1902  
 FAX (440) 934-7200

HMIS	
<b>H</b>	0
<b>F</b>	2
<b>R</b>	0
<b>PPE</b>	
Sec. 8	

**24 Hour Emergency Phone Number: (800) 424-9300**

### Section 2 Hazards Identification

**GHS Classification by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)**  
 Combustible dust

**Signal Word**  
 Warning

**Hazard Statements**  
 May form combustible dust concentrations in air.

**Precautionary Statements**  
 Keep away from heat/sparks/flames/hot surfaces-No smoking.  
 Ground/bond container and receiving container.  
 Use explosion-proof electrical/ventilating/lighting equipment.  
 Wear eye protection.  
 In case of fire, use Class D extinguisher or dry sand to extinguish.

### Section 3 Composition/Information on Ingredients

Component	CAS Number	Weight %
Aluminum	7429-90-5	99 - 100

### Section 4 First Aid Measures

**Eye Contact**  
 Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Skin Contact**  
 Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation**  
 Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

**Ingestion**  
 Do not induce vomiting. Keep respiratory tract clear. Get medical attention if symptoms occur.

**Most important symptoms/effects**  
 No information available.

**Notes to Physician**  
 Treat symptomatically

**Section 5 Fire-Fighting Measures**

**Suitable Extinguishing Media**

Use D-powder, or dry sand

**Unsuitable Extinguishing Media**

Water, halons, ABC powder, carbon dioxide, foam

**Special Hazards**

Material is potentially explosive when loosened and dispersed in air. Do not allow a dust cloud to be formed. Avoid heat, sparks, and open flames. Eliminate the generation of static electricity. Aluminum powder will react with acids, bases, or water to form flammable hydrogen gas. Finely divided burning aluminum powder will react violently with water to form hydrogen gas.

**Hazardous Combustion Products**

Oxides of aluminum

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Section 6 Accidental Release Measures**

**Personal Precautions**

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

**Environmental Precautions**

Avoid release to the environment.

**Methods for Containment and Clean Up**

Eliminate all sources of ignition. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Do not get water directly on material. Eliminate the generation of static electricity. Use natural bristle broom or brush to collect material into suitable container for disposal. Move containers away from spill to a safe area. Do not form dust cloud.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Keep away from heat, sparks and flame. Eliminate the generation of static electricity. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Do not eat, drink, or smoke when using this product. Use only with adequate ventilation. Dust can form an explosive mixture with air. Take precautionary measures against static charges. Use explosion-proof equipment and non-sparking tools. Empty containers may contain residues and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death.

**Conditions for safe storage, including incompatibilities**

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Store in a cool, dry place. Store in a tightly closed container. Store locked up. Keep separated from oxidizing agents, acids, alkalis, nitrates, alcohols, halogenated hydrocarbons, halogens, and water. Keep material dry. Humidity penetration into closed containers may lead to pressure increase and possible bursting of the container.

## Mia 82 Aluminum Powder

### Section 8 Exposure Controls/Personal Protection

#### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum	TWA: 1 mg/m <sup>3</sup> (respirable fraction)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal Protective Equipment

**Eye protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection:** 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 if irritation or other symptoms are experienced.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

### Section 9 Physical and Chemical Properties

<b>Appearance</b>	Fine silver/gray powder
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point</b>	660°C (1220°F)
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	Not a flammable solid based on testing in accordance with UN test methods
<b>Flammability or explosive limits, Upper</b>	No information available
<b>Flammability or explosive limits, Lower</b>	No information available
<b>Vapor Pressure</b>	Negligible
<b>Vapor Density</b>	No information available
<b>Density</b>	2.7 g/cm <sup>3</sup>
<b>Solubility</b>	Insoluble in water
<b>Partition coefficient; n-octanol/water</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available

### Section 10 Stability and Reactivity

#### Reactivity

No decomposition if stored and applied as directed. Contact with water liberates highly flammable gases.

**Section 10 Stability and Reactivity** continued

**Chemical Stability**

Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**

Reacts violently with halogenated hydrocarbons and oxidizers to produce heat. Reacts with water and slowly generates heat and hydrogen gas. Aluminum reacts with acids or alkalis to form flammable hydrogen gas. Will not polymerize.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Take precautionary measures against static discharge.

**Incompatible Materials**

Water, acids, bases, combustible materials, oxidizing materials, halogenated hydrocarbons, strong oxidizers.

**Hazardous Decomposition Products**

Combustion: oxides of aluminum

**Section 11 Toxicological Information**

**Likely Routes of Exposure**

**Eye Contact** May cause irritation. Symptoms may include pain or irritation, watering, and/or redness.

**Inhalation** May cause respiratory tract irritation.

**Skin Contact** May cause irritation on repeated contact. Symptoms may include dryness of skin.

**Ingestion** None known.

**Acute Toxicity** No acute toxicity information is available for this product

**Immediate Effects** Possible skin, eye or respiratory irritation

**Delayed Effects** None known

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** ACGIH: A4-Not classified as a Human Carcinogen

**Mutagenic Effects** No information available

**Reproductive Effects** No information available

**Specific Target Organ Toxicity -**

**Single exposure** No information available

**Specific Target Organ Toxicity -**

**Repeated exposure** No information available

**Aspiration hazard** Not expected to be a respiration hazard

**Section 12 Ecological Information**

**Ecotoxicity** Do not empty into drains

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

**Section 13 Disposal Considerations**

**Disposal Methods**

Dispose in accordance with all applicable regulations. Reprocess whenever possible. Co process or incinerate in authorized facilities. Incineration should be done in accordance with prevailing municipal, state, and federal laws and standards from local environmental agencies.

**Disposal of Contaminated Packaging**

Empty containers may contain residues and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. Dispose in accordance with all applicable regulations

**Section 14 Transport Information**

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

**Section 15 Regulatory Information**

**U.S. Federal Regulations**

<b>SARA 311/312</b>	No SARA Hazards
<b>SARA 313</b>	Aluminum (7429-90-5) dust or fume only

**California Proposition 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm

**Inventories**

<b>DSL (Canada)</b>	All components of this product are on the Canadian DSL
<b>TSCA (USA)</b>	On the inventory, or in compliance with the inventory

**Section 16 Other Information**

**Disclaimer**

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