

Safety Data Sheet



Freeman White Metal Pattern Letters

Date of Preparation: January 23, 2017

Section 1 Identification

Product name:

Freeman White Metal Pattern Letters

HMIS

H	1
F	0
R	0

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

Identified uses: Pattern and foundry industries

PPE
Sec. 8

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

24 Hour Emergency telephone number: (800) 424-9300

Section 2 Hazards Identification

Hazard Statements:

May damage fertility or the unborn child
May cause damage to organs (reproductive system, the blood, the brain, and the endocrine system) through prolonged or repeated exposure
Harmful if swallowed or inhaled

Precautionary Statements:

Wash hands thoroughly after handling
Hot molten material will cause severe burn on contact with skin

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number
Lead (Pb)	7439-92-1
Tin (Sn)	7440-31-5
Antimony (Sb)	7440-36-0

Section 4 First Aid Measures

General Measures: Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes. Emergency responders should take care to avoid secondary exposure to lead particulate. Wear appropriate protective equipment.

INHALATION: Remove to fresh air. Obtain medical attention if any respiratory distress.

SKIN: Wash hands with soap and warm water after handling. If skin irritation develops seek medical attention.

EYES: Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical

INGESTION: Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

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Section 5 Fire-Fighting Measures

Extinguishing Media: Use suitable extinguishing agent for surrounding materials and type of fire.

Unsuitable Extinguishing Media: Do not use water where molten metal is present.

Specific Hazards Arising from the Material: This product does not present fire or explosion hazards as shipped. Fine dust from processing may ignite if allowed to accumulate and subjected to an ignition source. May emit toxic metal oxide fumes under fire conditions.

Special Protective Equipment and Precautions for Firefighters: Full face, self-contained breathing apparatus and full protective clothing when necessary.

Section 6 Accidental Release Measures

Methods and Materials for Containment and Cleaning Up: For larger pieces - pick up mechanically. Sweep clean. Contain molten material with suitable inert material, such as sand. Allow to solidify, and then scrape up. Dispose of as a scrap solder metal.

Section 7 Handling and Storage

Precautions for safe handling

Always wash hands with soap and warm water after handling metal. Gloves should be worn.

Conditions for safe storage, including any incompatibilities

No special storage requirements

Section 8 Exposure Controls/Personal Protection

Exposure Limits

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Tin	2 mg/m ³	None estab.	2 mg/m ³	None estab.
Lead	50 µg/m ³	None estab.	0.05 mg/m ³	None estab.
Antimony	0.5 mg/m ³	None estab.	0.5 mg/m ³	None estab.

Skin protection

Always wear suitable protective gloves. Contaminated gloves should be replaced.

Section 9 Physical and Chemical Properties

Appearance: Silver or grey solid alloy
Odor: Odorless
Water Solubility: Insoluble

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Section 10 Stability and Reactivity

Reactivity: No data

Chemical Stability: Solid metal is stable; however, prior to introducing to molten metal, preheat to eliminate moisture. Adding moist solid metal to molten metal will cause violent splattering and/or explosions.

Possibility of Hazardous Reactions: No data

Conditions to Avoid: Avoid creating or accumulating fines or dusts.

Incompatible Materials: Strong acids, strong oxidizers, halogens and interhalogen compounds. Toxic stibine gas (SbH₃) may be formed when acid solutions of antimony compounds are treated with zinc or other reducing agents.

Hazardous Decomposition Products: White metal does not decompose; however, fumes of the alloying metals will evolve upon melting. Antimony can form stibine gas at high temperatures especially in reducing environments.

Section 11 Toxicological Information

Likely Routes of Exposure: Product as shipped does not present a hazard.

Symptoms of Exposure: Subsequent operations may create dusts or fumes which could be inhaled, ingested, or contact the skin or eye. Skin or eye contact with dust or fume may cause local irritation. Inhalation of dust or fumes may cause headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia, and pain in legs, arms, and joints. An acute short-term dose of lead could cause acute encephalopathy with seizures, coma, and death. However, short-term exposure of this magnitude is rare. Kidney damage, as well as anemia, can occur from acute exposure. Symptoms due to ingestion of lead dust or fume would be similar to those from inhalation. Other health effects such as metallic taste in the mouth and constipation or bloody diarrhea might also be expected to occur.

Acute and Chronic Effects:

Tin: Elemental tin is considered to have low toxicity. Ingestion of food contaminated with tin may cause transient gastrointestinal disturbances such as nausea, vomiting, diarrhea, fever and headache. Inhalation of tin as dust or fumes may cause a benign pneumoconiosis in exposed workers.

Lead: Lead accumulates in bone and body organs once it enters the body. Elimination from the body is slow. Initial and periodic medical examinations are advised for persons repeatedly exposed to levels above the recommended exposure limits of lead dust or fumes. Once lead enters the body, it can affect a variety of organ systems, including the nervous system, kidneys, reproductive system, blood formation, and gastrointestinal system.

Antimony: Acute systemic exposure to antimony compounds may cause loss of hair, dry scaly skin, and weight loss. Damage to the heart, liver, and kidneys can occur, and death from myocardial failure may follow. Fatalities from antimony poisoning are rare. The toxicity of elemental antimony has not been well studied, however, due to insolubility most elements in their metallic state are not considered to be serious health hazards.

To the best of our knowledge the chemical, physical and toxicological characteristics of the substance are not fully known.

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Section 12 Ecological Information

Persistence and degradability: Not biodegradable

Section 13 Disposal Considerations

Disposal: Dispose of as scrap metal in accordance with current Federal, State, and local regulations

Section 14 Transport Information

Shipping Name

DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

Section 15 Regulatory Information

TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.

Chemical Safety Assessment: A chemical safety assessment has not been carried out.

The information in this safety sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work Act and the Control of Hazardous to Health Regulations apply to the use of the product at work.

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.