

# SAFETY DATA SHEET

# SDS

## 1 PRODUCT AND SUPPLIER IDENTIFICATION

**Product Name:** Arsenic Metal

**Formula:** As

**Supplier:** Chenzhou Chenxi Metal Co., Ltd

Shuixiehuating Estate, Qingnian Ave, Chenzhou

Hunan, China 423000

**Telephone:** 86-735-5886796

**Fax:** 86-735-2326503

**Email:** chinesemetal@hotmail.com

**Emergency:** 86-735-5886796 (24hours)

**Recommended Uses:** additive in lead acid battery

## 2 HAZARDS IDENTIFICATION

**GHS Classification (29 CFR 1910.1200):** Acute toxicity - oral, category 4, Acute toxicity - inhalation, category 4.

**GHS Label Elements:**



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**Signal Word:** Danger

**Hazard Statements:** H302 Harmful if swallowed, H332 Harmful if inhaled.

**Precautionary Statements:** P261 Avoid breathing dust or fume, P264 Wash hands thoroughly after handling, P270 Do not eat, drink or smoke when using this product, P271 Use only outdoors or in a well-ventilated area, P281 Use personal protective equipment as required, P301+P304+P312 IF SWALLOWED OR INHALED: Call a POISON CENTER or doctor/physician if you feel unwell, P330 Rinse mouth, P501 Dispose of contents/container in accordance with local, state or federal regulations.

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredient:** Arsenic

**CAS#:** 7440-38-2

**%:** 100

**EC#:** 231-148-6

## 4 FIRST AID MEASURES

**General Measures:** Remove patient from area of exposure.

**INHALATION:** Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek immediate medical attention.

**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.

**SKIN:** Remove contaminated clothing, brush material off skin, wash affected area with soap and water. Seek medical attention.

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

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**Most Important Symptoms/Effects, Acute and Delayed:** May cause vomiting, abdominal pain, diarrhea. See section 11 for more information.

**Indication of Immediate Medical Attention and Special Treatment:** No other information available.

### 5 FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use suitable extinguishing agent for surrounding materials and type of fire. Smother small fires involving arsenic powder or dust with Class D or other metal extinguishing agent.

**Unsuitable Extinguishing Media:** No information available.

**Specific Hazards Arising from the Material:** Emits toxic fumes under fire conditions.

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

### 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Wear appropriate respiratory and protective equipment specified in section 8. Isolate spill area and provide ventilation. Avoid breathing dust or fume. Avoid contact with skin and eyes. Eliminate all sources of ignition.

**Methods and Materials for Containment and Cleaning Up:** Avoid creating dust. Wet sweep or vacuum up spill so as not to create more dust. Place in properly labeled closed containers.

**Environmental Precautions:** Do not allow to enter drains or to be released to the environment.

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## 7 HANDLING AND STORAGE

**Precautions for Safe Handling:** Handle in an enclosed, controlled process. Transfer material in closed systems or within a completely hooded containment with local exhaust ventilation. Prevent spillage. Avoid creating dusts. Avoid exposure to high temperature. Avoid breathing dust or fumes. Avoid contact with skin and eyes. Wash thoroughly before eating or smoking. See section 8 for information on personal protection equipment.

**Conditions for Safe Storage, Including Any Incompatibilities:** Store in a cool, dry area. Store material tightly sealed in properly labeled containers. Do not store together with oxidizers, acids or halogens. See section 10 for more information on incompatible materials.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits:** Arsenic

**OSHA/PEL:** 0.01 mg/m<sup>3</sup>

**ACGIH/TLV:** 0.01 mg/m<sup>3</sup>

**Appropriate Engineering Controls:** Handle in a controlled, enclosed environment. Ensure adequate ventilation to maintain exposures below occupational limits. Whenever possible the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne dust and fume to meet established occupational exposure limits. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air. Clothing worn in areas of exposure to arsenic dust or fume should be restricted to the workplace and laundered regularly.

### **Individual Protection Measures, Such as Personal Protective Equipment:**

**Respiratory Protection:** Where airborne exposures may exceed OSHA/ACGIH permissible air concentrations, the minimum respiratory protection recommended is negative pressure air purifying respirator with cartridges that are NIOSH/MSHA approved against dusts, fumes and mists having a TWA less than 0.05 mg/m<sup>3</sup>.

**Eye Protection:** Safety glasses or goggles.

**Skin Protection:** Wear impermeable gloves, protective work clothing. Protective overgarments or work clothing must be worn by persons who may become contaminated with particulate during work activities.

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### 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:**

**Form:** Lump

**Color:** Gray

**Odor:** Odorless

**Odor Threshold:** Not determined

**pH:** N/A

**Melting Point:** 817 °C (28 atm.)

**Boiling Point:** 613 °C (sublimes)

**Flash Point:** N/A

**Evaporation Rate:** N/A

**Flammability:** N/A

**Upper Flammable Limit:** N/A

**Lower Flammable Limit:** N/A

**Vapor Pressure:** 1 mm Hg @ 372 °C (solid)

**Vapor Density:** N/A

**Relative Density (Specific Gravity):** 5.727 g/cc @ 14 °C

**Solubility in H<sub>2</sub>O:** Insoluble

**Partition Coefficient (n-octanol/water):** Not determined

**Autoignition Temperature:** No data

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**Decomposition Temperature:** No data

**Viscosity:** N/A

### 10 STABILITY AND REACTIVITY

**Reactivity:** No data

**Chemical Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hydrogen gas can react with inorganic arsenic to form the highly toxic gas arsine.

**Conditions to Avoid:** Avoid creating dusts. Avoid high temperatures.

**Incompatible Materials:** Moist air, strong oxidizing agents, oxidizing acids, halogen and halogen compounds, sulfur, platinum, palladium, zinc, lithium, hydrogen gas.

**Hazardous Decomposition Products:** Arsenic oxide fume, arsine.

### 11 TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Inhalation, skin and eyes

**Symptoms of Exposure:** May cause irritation and systemic poisoning with symptoms including abdominal pain, nausea, vomiting, diarrhea, and encephalopathy and peripheral neuropathy.

**Acute and Chronic Effects:** Acute effects of inorganic arsenic compounds include vomiting, abdominal pain and diarrhea, followed by numbness and tingling of the extremities, muscle cramping, and death, in extreme cases. The first signs of long-term exposure to high levels of inorganic arsenic are usually observed in the skin, and include pigmentation changes, skin lesions, and hard patches on the palms and soles of the feet (hyperkeratosis). Other adverse health effects that may be associated with long-term ingestion of inorganic arsenic include developmental effects, neurotoxicity, diabetes and cardiovascular disease.

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**Acute Toxicity:** LD50 oral - rat - 763mg/kg

**Carcinogenicity:** **NTP:** Known to be human carcinogen    **IARC:** Group 1 - Carcinogenic to humans

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

## **12 ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data

**Persistence and Degradability:** No data

**Bioaccumulative Potential:** No data

**Mobility in Soil:** No data

**Other Adverse Effects:** Danger to drinking water and to aquatic organisms. Do not allow material to be released to the environment. No further relevant information available.

## **13 DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** The wastes should be placed in labeled container.

**Product:** Dispose of in accordance with Federal, State and Local regulations.

**Packaging:** Dispose of in accordance with Federal, State and Local regulations.

## **14 TRANSPORT INFORMATION**

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**UN Number:** 1558

**UN Proper Shipping Name:** Arsenic

**Transport Hazard Class:** 6.1

**Packing Group:** II

**Marine Pollutant:** No

**Special Precautions:** Warning: Toxic substances

**H S CODE** 28040000

**IMDG CODE** 6072

## 15 REGULATORY INFORMATION

**TSCA Listed:** All components are listed.

**Regulation (EC) No 1272/2008 (CLP):** Acute toxicity - oral, category 4, Acute toxicity - inhalation, category 4, Hazardous to the aquatic environment - acute hazard, category 1, Hazardous to the aquatic environment - chronic hazard, category 1.

**Canada WHMIS Classification (CPR, SOR/88-66):** Acute toxicity.

**HMIS Ratings:** Health: 2 Flammability: 1 Physical: 0

**NFPA Ratings:** Health: 2 Flammability: 1 Instability: 0

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

## 16 OTHER INFORMATION



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The information contained in this document is based on the state of our knowledge at the time of publication and is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI Metals makes no representation, warranty, or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information. ESPI Metals shall not be held liable for any damages resulting from handling or from contact with the above product. Users should satisfy themselves that they have all current data relevant to their particular use.

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