



Health	3
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Sodium arsenite, powder MSDS

Section 1: Chemical Product and Company Identification

Product Name: Sodium arsenite, powder

Catalog Codes: SLS2332

CAS#: 7784-46-5

RTECS: CG3675000

TSCA: TSCA 8(b) inventory: Sodium arsenite

CI#: Not available.

Synonym: Atlas A, Chem Pels C, Chem-Sen 56, Kill-All, Penite, Prodalumnol, Prodalumnol double, Sodanit; Sodium Metaarsenite

Chemical Name: Arsenious acid, sodium salt

Chemical Formula: NaAsO₂

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sodium arsenite	7784-46-5	100

Toxicological Data on Ingredients: Sodium arsenite: ORAL (LD50): Acute: 41 mg/kg [Rat]. 12 mg/kg [Rabbit]. DERMAL (LD50): Acute: 150 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of skin contact (permeator), of ingestion, of inhalation. Hazardous in case of skin contact (irritant), of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of inhalation. CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH, 1 (Proven for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, heart, brain, peripheral nervous system, gastrointestinal tract, skin, bone marrow.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.01 (mg(As)/m) from ACGIH (TLV) [United States] TWA: 0.01 (mg (As)/m) from OSHA (PEL) [United States] CEIL: 0.002 (mg(As)/m) from NIOSH [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Powdered solid. Crystalline powder.)

Odor: Odorless.

Taste: Saline.

Molecular Weight: 129.9 g/mole

Color: White. Off-white.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 615°C (1139°F)

Critical Temperature: Not available.

Specific Gravity: 1.87 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: 0% (v/v). 0% (w/w).

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Easily soluble in cold water, hot water. Slightly soluble in alcohol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, dust generation

Incompatibility with various substances: Reactive with acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Arsenites of alkali metals are slowly converted to arsenates by atmospheric oxygen and decomposed by atmospheric carbon dioxide. Absorbs CO₂ from air. Slightly hygroscopic; keep container tightly closed.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD₅₀): 12 mg/kg [Rabbit]. Acute dermal toxicity (LD₅₀): 150 mg/kg [Rat].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH, 1 (Proven for human.) by IARC. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. Causes damage to the following organs: blood, kidneys, heart, brain, peripheral nervous system, gastrointestinal tract, skin, bone marrow. May cause damage to the following organs: liver.

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (permeator), of ingestion, of inhalation. Hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals:

Lowest Published Lethal Dose: LDL[Man] - Route: Oral; Dose: 143 mg/kg LDL[Child] - Route: Oral; Dose: 2 mg/kg

Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic). Human: passes through the placenta. May cause cancer

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes skin irritation/erythema. May cause skin lesions or ulcerations of varied character, papules, multiple warts, and gross pigmentation with hyperkeratinization of exposed skin. It can be absorbed through the skin. It may be fatal if absorbed through the skin. Eyes: Causes eye irritation. May cause conjunctivitis, photophobia, corneal injury, dimness of vision, diplopia, lacrimation Inhalation: Causes upper respiratory tract irritation with coughing, a sensation of burning, dryness, and constriction of oral and nasal cavities Ingestion: Causes gastrointestinal tract irritation with nausea, vomiting, abdominal pain, dysphagia, profuse watery (and sometimes bloody) diarrhea, hypermotility, garlic odor of breath, metallic or garlic taste, dehydration, intense thirst, and fluid-electrolyte disturbances. Hypovolemia from "capillary leakage", cardiac arrhythmias, hypotension, tachycardia may also occur, but they may be secondary to electrolyte imbalances. Mee's lines, transverse white lines in the nails may also be seen after acute exposure. Peripheral neuropathy of both the sensory and motor type can appear and symptoms may include severe muscle weakness, decreased sensation to touch, pinprick and temperature. Acute poisoning from arsenic or arsenic compounds may also affect the brain and cause permanent encephalopathy. Acute poisoning may also affect behavior (excitement, change in motor activity), blood (hemolysis, pancytopenia, anemia), and kidneys (anuria, hematuria, proteinuria acute renal tubular necrosis), and liver (hepatocellular damage). Acute respiratory failure (apnea) from severe weakness of respiratory muscles, pulmonary edema from capillary leakage, respiratory distress syndrome may also occur with severe poisoning from arsenic or arsenic compounds **Chronic Potential Health Effects:**

Section 12: Ecological Information

Ecotoxicity:

Ecotoxicity in water (LC50): 3 mg/l 48 hours [Daphnia (daphnia)]. 23 mg/l 96 hours [Fish (Trout)]. 30 mg/l 96 hours [Fish (Blue gill)].

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification : Sodium arsenite UNNA: 2027 PG: II

Special Provisions for Transport: Marine Pollutant

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Sodium arsenite California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Sodium arsenite California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Sodium arsenite Connecticut hazardous material survey.: Sodium arsenite Illinois chemical safety act: Sodium arsenite New York release reporting list: Sodium arsenite Pennsylvania RTK: Sodium arsenite Massachusetts RTK: Sodium arsenite Massachusetts spill list: Sodium arsenite New Jersey: Sodium arsenite New Jersey spill list: Sodium arsenite Louisiana RTK reporting list: Sodium arsenite

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:**WHMIS (Canada):**

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R23/25- Toxic by inhalation and if swallowed. R45- May cause cancer. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S20/21- When using do not eat, drink or smoke. S28- After contact with skin, wash immediately with plenty of water. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S60- This material and its container must be disposed of as hazardous waste. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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