



Health	2
Fire	0
Reactivity	0
Personal Protection	H

Material Safety Data Sheet

Arsenite Standard, 0.100 N Solution MSDS

Section 1: Chemical Product and Company Identification

Product Name: Arsenite Standard, 0.100 N Solution

Catalog Codes: SLA3832

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Water; Arsenic trioxide; Sodium hydroxide

CI#: Not applicable.

Synonym: Arsenite Standard, 0.100 N Solution

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

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
Water	7732-18-5	<100
Arsenic trioxide	1327-53-3	<0.5
Sodium hydroxide	1310-73-2	<0.3

Toxicological Data on Ingredients: Arsenic trioxide: ORAL (LD50): Acute: 14.6 mg/kg [Rat.], 31.5 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH, 1 (Proven for human.) by IARC [Arsenic trioxide]. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. [Arsenic trioxide]. Mutagenic for mammalian somatic cells. [Sodium hydroxide]. **TERATOGENIC EFFECTS:** Classified POSSIBLE for human [Arsenic trioxide].

DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, kidneys, liver, cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

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. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

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.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards:

Arsenic trioxide + zinc will explode on heating. (Arsenic trioxide)

Section 6: Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. 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.. Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. 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.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection:

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

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor 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:

Arsenic trioxide TWA: 0.05 (mg(As)/m) [Canada] Sodium hydroxide STEL: 2 (mg/m³) from ACGIH (TLV) [United States] TWA: 2 CEIL: 2 (mg/m³) from OSHA (PEL) [United States] CEIL: 2 (mg/m³) from NIOSH Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Neutral.

Boiling Point: The lowest known value is 100°C (212°F) (Water).

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: The only known value is 1 (Water = 1) (Water).

Vapor Pressure: The highest known value is 2.3 kPa (@ 20°C) (Water).

Vapor Density: The highest known value is 0.62 (Air = 1) (Water).

Volatility: Not available.

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. Very slightly soluble in diethyl ether.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents, metals, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Dangerous when heated to decomposition. It emits toxic fumes of Arsenic. Dissolves in alkali to form arsenites. Incompatible with tannic acid, infusion of Chincona & other vegetable astringent infusions & decoctions, iron (in solution). Forms toxic volatile halides in contact with halide acids. Forms volatile, highly toxic Arsine when reduced in acid solution. A vigorous reaction occurs between Oxygen Difluoride, Aluminum Chloride and Arsenic Trioxide. Chlorine Trifluoride + Arsenic Trioxide produces a violent reaction without flame. Can generate Arsine, which is an extremely poisonous gas, when arsenic compounds contact acid, alkalies, or water in the presence of an active metal (zinc, aluminum, manganese, sodium, iron, etc.) (Arsenic trioxide)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

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

Toxicity to Animals:

LD50: Not available. LC50: Not available.

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH, 1 (Proven for human.) by IARC [Arsenic trioxide]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Arsenic trioxide]. Mutagenic for mammalian somatic cells. [Sodium hydroxide]. TERATOGENIC EFFECTS: Classified POSSIBLE for human [Arsenic trioxide]. Contains material which may cause damage to the following organs: blood, kidneys, liver, cardiovascular system, central nervous system (CNS).

Other Toxic Effects on Humans:

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

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

Passes through the placental barrier in human. May affect genetic material. May cause adverse reproductive (paternal and maternal effects as well as fetotoxicity or post implantation mortality) and birth defects (teratogen). May cause cancer (tumorigenic) (Arsenic trioxide)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. May also affect vision. Inhalation: May cause respiratory tract irritation with sore throat, coughing, shortness of breath, and delayed lung edema. Ingestion: May be fatal if swallowed. Causes severe digestive tract irritation. Symptoms may include garlic-like odor of breath, garlic taste, possible bloody diarrhea, Mee's Lines (transverse white lines on nails), abdominal pain, nausea, vomiting. May also affect the liver, blood (anemia, hemolysis, pancytopenia), urinary tract (Kidneys), cardiovascular system (lowering of blood pressure and changes in EKG), behavior/Central Nervous System, metabolism, and brain. Chronic Potential Health Effects:

Section 12: Ecological Information

Ecotoxicity: Not available.

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: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

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: Arsenic trioxide 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: Arsenic trioxide 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: Arsenic trioxide Connecticut hazardous material survey.: Arsenic trioxide Illinois toxic substances disclosure to employee act: Sodium hydroxide Illinois chemical safety act: Arsenic trioxide; Sodium hydroxide New York release reporting list: Arsenic trioxide; Sodium hydroxide Rhode Island RTK hazardous substances: Arsenic trioxide; Sodium hydroxide Pennsylvania RTK: Arsenic trioxide; Sodium hydroxide Minnesota: Sodium hydroxide Massachusetts RTK: Arsenic trioxide; Sodium hydroxide Massachusetts spill list: Arsenic trioxide New Jersey: Arsenic trioxide; Sodium hydroxide New Jersey spill list: Arsenic trioxide Louisiana RTK reporting list: Arsenic trioxide Louisiana spill reporting: Arsenic trioxide; Sodium hydroxide TSCA 8(b) inventory: Water; Arsenic trioxide; Sodium hydroxide SARA 302/304/311/312 extremely hazardous substances: Arsenic trioxide

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

R22- Harmful if swallowed. R45- May cause cancer. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label. S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: h

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

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

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

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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