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|---------------------|---|
| Health | 2 |
| Fire | 0 |
| Reactivity | 0 |
| Personal Protection | H |

Material Safety Data Sheet

Sodium arsenite 0.5% solution MSDS

Section 1: Chemical Product and Company Identification

Product Name: Sodium arsenite 0.5% solution
Catalog Codes: SLS1534
CAS#: Mixture.
RTECS: Not applicable.
TSCA: TSCA 8(b) inventory: Water; Sodium arsenite, powder
CI#: Not available.
Synonym: Sodium Arsenite, 0.5% (w/v) Aqueous Solution, APHA
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 | 99.5 |
| Sodium arsenite, powder | 7784-46-5 | 0.5 |

Toxicological Data on Ingredients: Sodium arsenite, powder: 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:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Slightly hazardous in case of skin contact (permeator). Non-corrosive for skin. Non-corrosive to the eyes. Non-corrosive for lungs.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH, 1 (Proven for human.) by IARC [Sodium arsenite, powder]. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. [Sodium arsenite, powder]. Mutagenic for bacteria and/or yeast. [Sodium arsenite, powder]. **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. The substance may be toxic to liver. 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 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: Not available.

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.. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.

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

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:

Sodium arsenite, powder TWA: 0.01 (mg/m³) from ACGIH (TLV) [United States] TWA: 0.01 (mg/m³) from OSHA (PEL) [United States] CEIL: 0.002 (mg/m³) from NIOSH [United States] 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): Not available

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: 0% (v/v). (Sodium arsenite, powder.) 0% (w/w). (Sodium arsenite, powder.)

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.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Not available.

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. (Sodium arsenite, powder)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

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 [Sodium arsenite, powder]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Sodium arsenite, powder]. Mutagenic for bacteria and/or yeast. [Sodium arsenite, powder]. Contains material which may cause damage to the following organs: liver.

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:

Lowest Published Lethal Dose: LDL[Man] - Route: Oral; Dose: 143 mg/kg LDL[Child] - Route: Oral; Dose: 2 mg/kg (Sodium arsenite, powder)

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 (Sodium arsenite, powder)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes skin irritation/erythema. It can be absorbed through the skin. It may be harmful if absorbed through the skin. Eyes: Causes eye irritation. Inhalation: It may cause upper respiratory tract irritation. The following health effects are for Sodium Arsenite: 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: Skin Contact and Inhalation: Chronic exposure to arsenic or arsenic compounds by dermal contact or inhalation may cause hoarseness of voice, nasal irritation, possible perforation of the nasal septum, irritation of the eyes,

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 product itself and its products of degradation are not toxic.

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: Sodium arsenite, powder
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, powder
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, powder
Connecticut hazardous material survey.: Sodium arsenite, powder
Illinois chemical safety act: Sodium arsenite, powder
New York release reporting list: Sodium arsenite, powder
Pennsylvania RTK: Sodium arsenite, powder
Massachusetts RTK: Sodium arsenite, powder
Massachusetts spill list: Sodium arsenite, powder
New Jersey: Sodium arsenite, powder
New Jersey spill list: Sodium arsenite, powder
Louisiana RTK reporting list: Sodium arsenite, powder
Louisiana spill reporting: Sodium arsenite, powder
TSCA 8(b) inventory: Water; Sodium arsenite, powder
SARA 302/304/311/312 extremely hazardous substances: Sodium arsenite, powder

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):

R45- May cause cancer. S24/25- Avoid contact with skin and eyes. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. 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: 2

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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