## Section 1. Product and Company Identification

| | |
|---|---|
| Product Identification: | 1000 µg/mL Arsenic$^{+5}$ in Water |
| SDS Number: | 10003-7 |
| Recommended Use: | For Laboratory Use. |
| Company Identification: | High-Purity Standards<br>P.O. Box 41727<br>Charleston, SC 29423<br>Telephone: (843) 767-7900<br>FAX: (843) 767-7906 |

In case of emergency call INFOTRAC: 800-535-5053

## Section 2. Hazard Identification

**Classification:**
Skin Corrosion/Irritation, Category 1
Serious Eye Damage/ Eye Irritation, Category 1
Carcinogenicity, Category 1A

**Labeling:**

**Symbol:** 

**Signal Word:** Danger.

**Hazard Statement:** Causes severe skin burns and eye damage. May cause cancer.

**Precautionary Statement:** Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

## Section 3. Composition

| Component | CAS/EINECS Registry # | Percent Concentration |
|---|---|---|
| Sodium Arsenate Heptahydrate ($Na_2HAsO_4 * {}_7H_2O$) | 7778-43-0/231-902-4 | 0.1 (as As$^{+5}$) |
| Water, deionized | 7732-18-5/ 231-791-2 | Balance |

## Section 4. First Aid Measures

**IF ON SKIN (or hair):** Remove/Take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Call a physician if irritation develops.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**IF SWALLOWED:** Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

**IF INHALED:** Remove to fresh air and keep at rest in a position comfortable for breathing.

**IF** exposed or concerned**:** Get medical attention/advice.

**Target Organs:** Eyes, skin, respiratory system. Increases risk of lung, liver, kidney, and bladder cancer with prolonged exposure.

## Section 5. Fire Fighting Measures

Fire & Explosion hazards: Sodium Arsenate Heptahydrate is a negligible fire hazard when exposed to heat and/or flames.

Extinguishing Media: Use any extinguishing media that is suitable for the surrounding area.
Specific Methods: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

## Section 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Do not allow to enter drainage systems or water ways. Dike area and dilute spill with water and neutralize with soda ash, limestone, etc. Place the neutralized material into containers suitable for eventual disposal, reclamation, or destruction. Always dispose of in accordance with local regulations.

## Section 7. Handling and Storage

Store in a cool, dry, ventilated storage area with acid resistant floors and good drainage. Keep out of direct sunlight and away from heat, water, and incompatible materials. When diluting, the acid should always be added slowly to water and in small amounts. Refer to Section 8 for personal handling instructions.

## Section 8. Exposure Controls and Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep any buildup of airborne contaminants below their respective threshold limit value. Ensure the availability of eyewash stations and safety showers.
Personal Protection: Wear proper gloves, safety glasses with side shields, lab coat/apron.
**Exposure Limits:**

| Component | ACGIH TLV | OSHA PEL |
|---|---|---|
| Sodium Arsenate Heptahydrate | 0.01 mg/m$^3$ (As) | 10 µg/ m$^3$ (As) |

## Section 9. Physical and Chemical Properties

Physical State: Liquid
Color: Clear, liquid
Odor: Odorless to a faint pungent odor
Odor threshold: None
pH: 5-8
Melting point: N/A
Freezing Point: N/A
Boiling Point: Approximately 100°C
Flash point: N/A
Evaporation rate: N/A
Flammability: N/A
Explosion limits: N/A
Vapor Pressure (mm): N/A
Vapor Density (air+1): N/A
Relative density: ($H_2O$ = 1): Approximately 1.0
Solubility in $H_2O$: Complete
Auto ignition temperature: N/A
Decomposition temperature: N/A
Molecular Weight: 74.92 (As)

## Section 10. Stability and Reactivity

Stability Indicator: YES
Conditions to Avoid: Metals, hydroxides, carbonates, cyanides
Incompatibles: Strong oxidizing agents
Hazardous Decomposition Products: Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas. Irritating and toxic fumes and gases, oxides of arsenic, and arsine.
Hazardous Polymerization: Will not occur.

## Section 11. Toxicological Information

**RTECS#**
$Na_2HAsO_4$ * $7H_2O$ - CG3675000
$LD_{50}$, Oral, Rat: (Arsenic) 763 mg/kg.

## Section 12. Ecological Information

Ecotoxicological information: Do not allow material to reach ground water, water bodies, or sewage system.
$LC_{50}$ - Pimephales promelas (fathead minnow) - 9.9 mg/l - 96.0 h
$EC_{50}$ - Daphnia magna (Water flea) - 3.8 mg/l - 48 h

## Section 13. Disposal Considerations

General: Follow Federal, state and local regulations for waste.

## Section 14. Transport Information

D.O.T. Classification: Not Hazardous by DOT regulations

## Section 15. Regulations (Not meant to be all inclusive-selected regulation listed)

TSCA Status: Components of this solution are listed on the TSCA Inventory.
RCRA Status: No
SARA: Subject to the reporting requirements of Section 313 or SARA Title III and of 40 CFR 372
Risk Phrases: R25, R34, , R48 Toxic if swallowed; May cause cancer;
Safety Phrases: S36/37/39, S53 Wear suitable protective clothing, gloves and eye/face protection; Avoid exposure- obtain special instruction before use.
WHMIS Information (Canada): D: Poisonous/Carcinogen – category 2.

## Section 16. Other Information

HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel only. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The MSDS was prepared carefully and represents the best data currently available to us; however, HPS does not certify the data on the MSDS. Certified values for this material are given only on the Certificate of Analysis.

Theodore C. Rains, Ph.D.