

Issuing Date 8/22/2011

Revision Number 0

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** SODIUM ARSENITE SOLUTION

**Product Code(s)** 4128

**Recommended Use** Test kit reagent. Laboratory chemicals. Industrial (not for food or food contact use).

**Company** LaMotte Company, Inc.  
802 Washington Avenue  
P.O. Box 329  
Chestertown, MD 21620  
USA

**Emergency Telephone Number** 24 Hour Emergency Number (CHEM-TEL):  
USA, Canada, Puerto Rico 1-800-255-3924  
Outside North American Continent (Call collect) 813-248-0585

**2. HAZARDS IDENTIFICATION****WARNING!****Emergency Overview**

Harmful by inhalation, in contact with skin and if swallowed  
May be fatal if inhaled, absorbed through skin, or swallowed  
May cause skin, eye, and respiratory tract irritation  
Contains a known or suspected carcinogen

**Appearance** Clear, colorless**Physical State** Liquid**Odor** None

**OSHA Regulatory Status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Potential Health Effects**

**Principle Routes of Exposure** Eye or skin contact, ingestion, and inhalation

**Acute Toxicity****Eyes**

May cause irritation.

**Skin**

May be fatal if absorbed through skin. May cause irritation.

**Inhalation**

May be fatal if inhaled. May cause irritation of respiratory tract.

**Ingestion**

May be fatal if swallowed. Causes irritation or burns to the digestive and respiratory tract.

**Chronic Effects****3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Chemical Name    | CAS-No    | Weight % |
|------------------|-----------|----------|
| Sodium hydroxide | 1310-73-2 | 0.2      |
| Sodium arsenite  | 7784-46-5 | 0.5      |
| Water            | 7732-18-5 | to 100%  |

## 4. FIRST AID MEASURES

|                                   |   |
|-----------------------------------|---|
| <b>General Advice</b>             | Do not get in eyes, on skin, or on clothing. Show this safety data sheet to the doctor in attendance.   |
| <b>Eye Contact</b>                | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.  |
| <b>Skin Contact</b>               | Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Call a physician immediately.  |
| <b>Inhalation</b>                 | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Consult a physician.  |
| <b>Ingestion</b>                  | DO NOT induce vomiting unless directed to do so by a physician or poison control center. Drink large quantity of water. Get medical attention. Never give anything by mouth to an unconscious person.   |
| <b>Protection of First-aiders</b> | Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |

## 5. FIRE-FIGHTING MEASURES

|                                     |  |                       |                    |  |
|-------------------------------------|--|-----------------------|--------------------|--|
| <b>Flammable Properties</b>         | Not a fire hazard.   |                       |                    |  |
| <b>Flash Point</b>                  | Not applicable   |                       |                    |  |
| <b>Suitable Extinguishing Media</b> | Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam. |                       |                    |  |
| <b>Explosion Data</b>               |  |                       |                    | <b>Physical and Chemical Hazards -</b> |
| <b>NFPA</b>                         | <b>Health Hazard 3</b>   | <b>Flammability 0</b> | <b>Stability 0</b> |  |
| <b>HMIS</b>                         | <b>Health Hazard 3</b>   | <b>Flammability 0</b> | <b>Stability 0</b> |  |

## 6. ACCIDENTAL RELEASE MEASURES

|                                |  |
|--------------------------------|--|
| <b>Personal Precautions</b>    | Ensure adequate ventilation. Wear respiratory protection. Use personal protective equipment. Refer to Section 8. Avoid contact with skin, eyes and inhalation of vapors.   |
| <b>Methods for Cleaning Up</b> | Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product and washings from entering drains, sewers or surface water due to high toxicity to aquatic organisms. After cleaning, flush away traces with water. |

## 7. HANDLING AND STORAGE

|                 |  |
|-----------------|--|
| <b>Handling</b> | Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Avoid ingestion and inhalation. Do not eat, drink, or smoke when using this product. |
| <b>Storage</b>  | Keep containers tightly closed in a dry, cool, and well-ventilated place. Store away from strong acids, oxidizers, iron and zinc. Keep out of the reach of children.                                       |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-----------|----------|------------|
|---------------|-----------|----------|------------|

|                               |                             |                           |   |
|-------------------------------|-----------------------------|---------------------------|---|
| Sodium hydroxide<br>1310-73-2 | None Known                  | TWA: 2 mg/m <sup>3</sup>  | IDLH: 10 mg/m <sup>3</sup><br>Ceiling: 2 mg/m <sup>3</sup>    |
| Sodium arsenite<br>7784-46-5  | TWA: 0.01 mg/m <sup>3</sup> | TWA: 10 µg/m <sup>3</sup> | IDLH: 5 mg/m <sup>3</sup><br>Ceiling: 0.002 mg/m <sup>3</sup> |
| Water<br>7732-18-5            | None Known                  | None Known                | None Known  |

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment****Eye/Face Protection**

Safety glasses with side-shields.

**Skin and Body Protection**

Wear protective gloves/clothing. Gloves & Lab Coat.

**Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                       |                  |                            |               |
|-----------------------|------------------|----------------------------|---------------|
| <b>Appearance</b>     | Clear, colorless | <b>Odor</b>                | None          |
| <b>Physical State</b> | Liquid           | <b>pH</b>                  | 12            |
| <b>Flash Point</b>    | Not applicable   | <b>Boiling Point/Range</b> | > 100°C/212°F |

|                       |                 |                      |             |
|-----------------------|-----------------|----------------------|-------------|
| <b>Vapor Pressure</b> | <17 mmHg @ 20°C | <b>Vapor Density</b> | <1(Air = 1) |
|-----------------------|-----------------|----------------------|-------------|

## 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions of use and storage.

**Incompatible Products** Strong acids. Strong oxidizing agents.

**Conditions to Avoid** Incompatible products.

**Hazardous Decomposition Products** Sodium oxides. arsenic oxides.

**Hazardous Polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

| Chemical Name    | LD50 Oral        | LD50 Dermal           | LC50 Inhalation |
|------------------|------------------|-----------------------|-----------------|
| Sodium hydroxide | None Known       | 1350 mg/kg ( Rabbit ) | None Known      |
| Sodium arsenite  | 41 mg/kg ( Rat ) | None Known            | None Known      |
| Water            | 90 mL/kg ( Rat ) | None Known            | None Known      |

**Chronic Toxicity**

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|------|-----|------|
|---------------|-------|------|-----|------|

|                  |            |            |            |            |
|------------------|------------|------------|------------|------------|
| Sodium hydroxide | None Known | None Known | None Known | None Known |
| Sodium arsenite  | A1         | Group 1    | Known      | X          |
| Water            | None Known | None Known | None Known | None Known |

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A1 - Known Human Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)**

Known - Known Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

X - Present

| Chemical Name    | EU - Endocrine Disruptors Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor Information |
|------------------|--|--|---|
| Sodium hydroxide | None Known                               | None Known                                       | None Known                              |
| Sodium arsenite  | None Known                               | None Known                                       | None Known                              |
| Water            | None Known                               | None Known                                       | None Known                              |

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Very toxic to aquatic organisms.

| Chemical Name    | Toxicity to Algae | Toxicity to Fish                            | Microtox   | Daphnia Magna (Water Flea) |
|------------------|-------------------|---|------------|----------------------------|
| Sodium hydroxide | None Known        | LC50= 45.4 mg/L<br>Oncorhynchus mykiss 96 h | None Known | None Known                 |
| Sodium arsenite  | None Known        | None Known                                  | None Known | None Known                 |
| Water            | None Known        | None Known                                  | None Known | None Known                 |

| Chemical Name    | Log Pow    |
|------------------|------------|
| Sodium hydroxide | None Known |
| Sodium arsenite  | None Known |
| Water            | None Known |

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Should not be released into the environment.

| Chemical Name                   | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|---------------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Sodium hydroxide -<br>1310-73-2 | None Known                           | None Known             | None Known             | None Known             |
| Sodium arsenite - 7784-46-5     | None Known                           | None Known             | None Known             | None Known             |
| Water - 7732-18-5               | None Known                           | None Known             | None Known             | None Known             |

## 14. TRANSPORT INFORMATION

DOT

|                                 |                                   |
|---------------------------------|-----------------------------------|
|                                 | Not regulated                     |
| <b>Proper Shipping Name</b>     | SODIUM ARSENITE, AQUEOUS SOLUTION |
| <b>Hazard Class</b>             | 6.1                               |
| <b>UN-No</b>                    | 1686                              |
| <b>Packing Group</b>            | III                               |
| <b>Reportable Quantity (RQ)</b> | 1                                 |

IATA

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>UN-No</b>                | 1686                              |
| <b>Proper Shipping Name</b> | SODIUM ARSENITE, AQUEOUS SOLUTION |
| <b>Hazard Class</b>         | 6.1                               |
| <b>Packing Group</b>        | III                               |

IMDG/IMO

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>Proper Shipping Name</b> | SODIUM ARSENITE, AQUEOUS SOLUTION |
| <b>Hazard Class</b>         | 6.1                               |
| <b>UN-No</b>                | 1686                              |
| <b>Packing Group</b>        | III                               |

## 15. REGULATORY INFORMATION

**International Inventories**

| Component                             | TSCA    | DSL | EINECS/ELINCS | ENCS          | IECSC | KECL     | PICCS | AICS |
|---------------------------------------|---------|-----|---------------|---------------|-------|----------|-------|------|
| Sodium hydroxide<br>1310-73-2 ( 0.2 ) | Present | X   | X             | 1-410; 2-1972 | X     | KE-31487 | X     | X    |
| Sodium arsenite<br>7784-46-5 ( 0.5 )  | Present | X   | X             | 1-825         | X     | KE-31435 | X     | X    |
| Water<br>7732-18-5 ( to 100% )        | Present | X   | X             | ENCS          | X     | KE-35400 | X     | X    |

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name    | CAS-No    | Weight % | SARA 313 - Threshold Values % |
|------------------|-----------|----------|-------------------------------|
| Sodium hydroxide | 1310-73-2 | 0.2      | None Known                    |
| Sodium arsenite  | 7784-46-5 | 0.5      | 0.1                           |
| Water            | 7732-18-5 | to 100%  | None Known                    |

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute Health Hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire Hazard</b>                       | No  |
| <b>Sudden Release of Pressure Hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Component                             | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium hydroxide<br>1310-73-2 ( 0.2 ) | None Known                  | None Known             | None Known                | None Known                 |
| Sodium arsenite<br>7784-46-5 ( 0.5 )  | 1 lb                        | X                      | None Known                | X                          |
| Water<br>7732-18-5 ( to 100% )        | None Known                  | None Known             | None Known                | None Known                 |

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

| Chemical Name    | CAS-No    | Weight % | HAPS data  | VOC Chemicals | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|------------------|-----------|----------|--|---------------|-------------------------|-------------------------|
| Sodium hydroxide | 1310-73-2 | 0.2      | None Known   | None Known    | None Known              | None Known              |
| Sodium arsenite  | 7784-46-5 | 0.5      | Present (including Arsine and any unique chemical substance that contains Arsenic as part of its infrastructure) | None Known    | None Known              | None Known              |
| Water            | 7732-18-5 | to 100%  | None Known   | None Known    | None Known              | None Known              |

**CERCLA**

| Chemical Name    | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|------------------|--------------------------|------------------------------------|
| Sodium hydroxide | 1000 lb                  | None Known                         |
| Sodium arsenite  | 1 lb                     | 1 lb                               |
| Water            | None Known               | None Known                         |

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name    | CAS-No    | California Prop. 65 |
|------------------|-----------|---------------------|
| Sodium hydroxide | 1310-73-2 | None Known          |
| Sodium arsenite  | 7784-46-5 | Carcinogen          |
| Water            | 7732-18-5 | None Known          |

**U.S. State Right-to-Know Regulations**

| Chemical Name    | Massachusetts | New Jersey | Pennsylvania | Illinois   | Rhode Island |
|------------------|---------------|------------|--------------|------------|--------------|
| Sodium hydroxide | X             | X          | X            | None Known | X            |
| Sodium arsenite  | X             | X          | X            | X          | None Known   |
| Water            | None Known    | None Known | None Known   | None Known | None Known   |

**International Regulations****Mexico - Grade**




| Chemical Name    | Carcinogen Status | Exposure Limits |
|------------------|-------------------|-----------------|
| Sodium hydroxide | None Known        | None Known      |
| Sodium arsenite  | A1                | None Known      |
| Water            | None Known        | None Known      |

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

| Component                             | WHMIS Hazard Class  |
|---------------------------------------|---|
| Sodium hydroxide<br>1310-73-2 ( 0.2 ) | 1 %<br>E  |
| Sodium arsenite<br>7784-46-5 ( 0.5 )  | 0.1 %   |
| Water<br>7732-18-5 ( to 100% )        | Uncontrolled product according to WHMIS classification criteria |

**16. OTHER INFORMATION**

| NFPA  | HMIS  | PPE           | Transport Symbol |             |   |            |   |  |   |
|---|---|---------------|------------------|-------------|---|------------|---|--|---|
|  | <table border="1"> <tr> <td data-bbox="508 201 716 247">Health Hazard</td> <td data-bbox="724 201 792 247">3</td> </tr> <tr> <td data-bbox="508 249 716 296">Fire Hazard</td> <td data-bbox="724 249 792 296">0</td> </tr> <tr> <td data-bbox="508 298 716 344">Reactivity</td> <td data-bbox="724 298 792 344">0</td> </tr> </table> | Health Hazard | 3                | Fire Hazard | 0 | Reactivity | 0 |  |  |
| Health Hazard   | 3   |               |                  |             |   |            |   |  |   |
| Fire Hazard   | 0   |               |                  |             |   |            |   |  |   |
| Reactivity  | 0   |               |                  |             |   |            |   |  |   |

**Prepared By** Regulatory Affairs Department

**Issuing Date** 8/22/2011

**Revision Date** 31-Aug-2011

**Revision Note**  
Initial Release

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**