



GARDENA, CA  
NEW BRUNSWICK, NJ

# Material Safety Data Sheet

| NFPA  | HMIS  | Personal Protective Equipment |   |             |   |            |   |  |
|---|---|-------------------------------|---|-------------|---|------------|---|--|
|  | <table><tr><td>Health Hazard</td><td>2</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr></table> | Health Hazard                 | 2 | Fire Hazard | 1 | Reactivity | 0 | <br>See Section 15. |
| Health Hazard   | 2   |                               |   |             |   |            |   |  |
| Fire Hazard   | 1   |                               |   |             |   |            |   |  |
| Reactivity  | 0   |                               |   |             |   |            |   |  |

| Section 1. Chemical Product and Company Identification |  | Page Number: 1   |
|--|--|--|
| <b>Common Name/<br/>Trade Name</b>                     | <b>Cacodylic acid, sodium salt, trihydrate</b>   | <b>Catalog Number(s).</b> CA101  |
|  |  | <b>CAS#</b> 6131-99-3 (anhydrous CAS no. 124-65-2)   |
| <b>Manufacturer</b>                                    | SPECTRUM LABORATORY PRODUCTS INC.<br>14422 S. SAN PEDRO STREET<br>GARDENA, CA 90248  | <b>RTECS</b> CH7890000   |
|  |  | <b>TSCA</b> TSCA 8(b) inventory: No products were found. This chemical is exempt from TSCA 8(b) Inventory listing since it is a hydrate. However, the anhydrous form CAS no. 124-65-2) is listed on the TSCA 8(b) Inventory. |
| <b>Commercial Name(s)</b>                              | Not available.   | <b>CI#</b> Not available.  |
| <b>Synonym</b>   | Dimethylarsenic acid sodium salt trihydrate<br>Dimethylarsinic acid sodium salt trihydrate<br>Hydroxydimethylarsine oxide sodium salt trihydrate<br>Sodium dimethylarsinic acid trihydrate | <b>IN CASE OF EMERGENCY</b><br><b><u>CHEMTREC (24hr) 800-424-9300</u></b><br><br>CALL (310) 516-8000   |
| <b>Chemical Name</b>                                   | Arsine oxide, hydroxydimethyl-, sodium salt, trihydrate  |  |
| <b>Chemical Family</b>                                 | Not available.   |  |
| <b>Chemical Formula</b>                                | (CH <sub>3</sub> ) <sub>2</sub> AsO <sub>2</sub> Na.3H <sub>2</sub> O or C <sub>2</sub> -H <sub>6</sub> -As-O <sub>2</sub> -Na.3H <sub>2</sub> O   |  |
| <b>Supplier</b>  | SPECTRUM LABORATORY PRODUCTS INC.<br>14422 S. SAN PEDRO STREET<br>GARDENA, CA 90248  |  |

| Section 2. Composition and Information on Ingredients |  |                          |                           |                           |             |
|---|--|--------------------------|---------------------------|---------------------------|-------------|
|   |  | Exposure Limits          |                           |                           |             |
| Name  | CAS #  | TWA (mg/m <sup>3</sup> ) | STEL (mg/m <sup>3</sup> ) | CEIL (mg/m <sup>3</sup> ) | % by Weight |
| 1) Cacodylic acid, sodium salt                        | 6131-99-3  |                          |                           |                           | 100         |
|   |  |                          |                           |                           |             |
| <b>Toxicological Data on Ingredients</b>              | <b>Cacodylic acid, sodium salt</b><br>LD50: Not available.<br>LC50: Not available. |                          |                           |                           |             |

**Section 3. Hazards Identification**

|   |   |
|---|---|
| <b>Potential Acute Health Effects</b>   | Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Slightly hazardous in case of inhalation. Severe over-exposure can result in death.  |
| <b>Potential Chronic Health Effects</b> | <b>CARCINOGENIC EFFECTS:</b> Classified 1 (Proven for human.) by IARC (listed as Arsenic compounds)<br><b>MUTAGENIC EFFECTS:</b> Not available.<br><b>TERATOGENIC EFFECTS:</b> Not available.<br><b>DEVELOPMENTAL TOXICITY:</b> Not available.<br>The substance may be toxic to blood, kidneys, heart, brain, peripheral nervous system, gastrointestinal tract, skin, bone marrow.<br>Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. |

**Section 4. First Aid Measures**

|                             |   |
|-----------------------------|---|
| <b>Eye Contact</b>          | 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.  |
| <b>Skin Contact</b>         | 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.  |
| <b>Serious Skin Contact</b> | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.   |
| <b>Inhalation</b>           | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.  |
| <b>Serious Inhalation</b>   | 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. <b>WARNING:</b> 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. |
| <b>Ingestion</b>            | 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.   |
| <b>Serious Ingestion</b>    | Not available.  |

**Section 5. Fire and Explosion Data**

|  |   |
|--|---|
| <b>Flammability of the Product</b>                         | May be combustible at high temperature.   |
| <b>Auto-Ignition Temperature</b>                           | Not available.  |
| <b>Flash Points</b>  | Not available.  |
| <b>Flammable Limits</b>                                    | Not available.  |
| <b>Products of Combustion</b>                              | These products are carbon oxides (CO, CO <sub>2</sub> ). Some metallic oxides.  |
| <b>Fire Hazards in Presence of Various Substances</b>      | Slightly flammable to flammable in presence of heat.  |
| <b>Explosion Hazards in Presence of Various Substances</b> | Risks of explosion of the product in presence of mechanical impact: Not available.<br>Risks of explosion of the product in presence of static discharge: Not available. |
| <b>Fire Fighting Media and Instructions</b>                | SMALL FIRE: Use DRY chemical powder.<br>LARGE FIRE: Use water spray, fog or foam. Do not use water jet.   |
| <b>Special Remarks on Fire Hazards</b>                     | When heated to decomposition it emits toxic fumes of arsenic & sodium oxide   |
| <b>Special Remarks on Explosion Hazards</b>                | Not available.  |

**Section 6. Accidental Release Measures**

|                    |   |
|--------------------|---|
| <b>Small Spill</b> | Use appropriate tools to put the spilled solid in a convenient waste disposal container.  |
| <b>Large Spill</b> | Poisonous solid.<br>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. Eliminate all ignition sources. Call for assistance on disposal. |

**Section 7. Handling and Storage**

|                    |   |
|--------------------|---|
| <b>Precautions</b> | Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. 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 oxidizing agents, acids, alkalis. |
| <b>Storage</b>     | Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic  |

**Section 8. Exposure Controls/Personal Protection**

|   |   |
|---|---|
| <b>Engineering Controls</b>                         | 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. |
| <b>Personal Protection</b>                          | Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.   |
| <b>Personal Protection in Case of a Large Spill</b> | 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.                    |
| <b>Exposure Limits</b>                              | TWA: 0.5 (mg(As)/m <sup>3</sup> ) (as Arsenic) from OSHA (PEL) [United States]<br>TWA: 0.5 STEL: 0.5 (mg/(As)m <sup>3</sup> ) (as Arsenic) [Canada]<br><br>Consult local authorities for acceptable exposure limits.  |

**Section 9. Physical and Chemical Properties**

|                                      |  |              |                |
|--------------------------------------|--|--------------|----------------|
| <b>Physical state and appearance</b> | Solid. (Crystalline solid. Crystals solid.)  | <b>Odor</b>  | Slight.        |
| <b>Molecular Weight</b>              | 214.03 g/mole  | <b>Taste</b> | Not available. |
| <b>pH (1% soln/water)</b>            | Not available.   | <b>Color</b> | White.         |
| <b>Boiling Point</b>                 | Not available.   |              |                |
| <b>Melting Point</b>                 | 60°C (140°F)   |              |                |
| <b>Critical Temperature</b>          | Not available.   |              |                |
| <b>Specific Gravity</b>              | Not available.   |              |                |
| <b>Vapor Pressure</b>                | Not applicable.  |              |                |
| <b>Vapor Density</b>                 | 7.4 (Air = 1)  |              |                |
| <b>Volatility</b>                    | Not available.   |              |                |
| <b>Odor Threshold</b>                | Not available.   |              |                |
| <b>Water/Oil Dist. Coeff.</b>        | Not available.   |              |                |
| <b>Ionicity (in Water)</b>           | Not available.   |              |                |
| <b>Dispersion Properties</b>         | See solubility in water.   |              |                |
| <b>Solubility</b>                    | Easily soluble in cold water.<br>Solubility in Water: 200 g/100 mL water @ 15-20 deg. C.<br>Solubility in alcohol: 40 g/100 ml alcohol @ 25 deg. C.; 100 g/100 mL of 90% alcohol @ 15-20 deg. C. |              |                |

**Section 10. Stability and Reactivity Data**

|  |   |
|--|---|
| <b>Stability</b>                               | The product is stable.  |
| <b>Instability Temperature</b>                 | Not available.  |
| <b>Conditions of Instability</b>               | Excess heat, incompatible materials, moist air, water   |
| <b>Incompatibility with various substances</b> | Reactive with oxidizing agents, acids, alkalis.   |
| <b>Corrosivity</b>                             | Non-corrosive in presence of glass.   |
| <b>Special Remarks on Reactivity</b>           | Loses water and becomes anhydrous at 120 deg. C.<br>Deliquescent. Liquifies in its water of hydration at about 60 deg. C. Hygroscopic; keep container tightly closed. |
| <b>Special Remarks on Corrosivity</b>          | Not available.  |
| <b>Polymerization</b>                          | Will not occur.   |

**Section 11. Toxicological Information**

|   |  |
|---|--|
| <b>Routes of Entry</b>                                  | Inhalation. Ingestion.   |
| <b>Toxicity to Animals</b>                              | LD50: Not available.<br>LC50: Not available.   |
| <b>Chronic Effects on Humans</b>                        | <b>CARCINOGENIC EFFECTS:</b> Classified 1 (Proven for human.) by IARC.<br>May cause damage to the following organs: blood, kidneys, heart, brain, peripheral nervous system, gastrointestinal tract, skin, bone marrow.  |
| <b>Other Toxic Effects on Humans</b>                    | Hazardous in case of skin contact (irritant), of ingestion.<br>Slightly hazardous in case of inhalation.   |
| <b>Special Remarks on Toxicity to Animals</b>           | Not available.   |
| <b>Special Remarks on Chronic Effects on Humans</b>     | May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.<br>May affect genetic material (mutagenic).<br>Can cause cancer  |
| <b>Special Remarks on other Toxic Effects on Humans</b> | Acute Potential Health Effects:<br>Skin: Causes skin irritation. It may be absorbed through the skin and cause system effects such as anorexia, nausea, abdominal pain, and elevated urinary arsenic levels.<br>Eyes: Causes eye irritation.<br>Inhalation: Causes respiratory tract irritation with laryngitis. May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea.<br>Ingestion: Sodium Cacodylate is a pentavalent arsenic compound. Ingestion can cause gastrointestinal tract irritation with garlic-like odor on the breath, abdominal pain, dysphagia, nausea, vomiting, diarrhea (sometimes watery and bloody). Dehydration, intense thirst, muscle weakness, and fluid- electrolyte disturbances may also occur. Mee's lines, transverse white lines in the nails may be seen, possibly taking up to 5 weeks to appear. It may affect urinary system (bladder, kidneys), liver, cardiovascular system (rapid pulse, cardiac arrhythmias), blood (hemolysis, pancytopenia, isolated leukopenia, anemia), peripheral nervous system (peripheral neuropathy), and may cause shock and coma.<br>Chronic Potential Health Effects:<br>Chronic effects of arsenic poisoning can include hyperpigmentation of the skin (especially on the palms of the hands and soles of the feet), Black Foot disease (gangrene), anemia, pancytopenia, cirrhosis of the liver or enlarged liver, hair loss and nail changes.<br>Skin: Prolonged or repeated skin contact may cause dermatitis. |


**Section 12. Ecological Information**

|  |   |
|--|---|
| <b>Ecotoxicity</b>                                       | Not available.  |
| <b>BOD5 and COD</b>                                      | Not available.  |
| <b>Products of Biodegradation</b>                        | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| <b>Toxicity of the Products of Biodegradation</b>        | The products of degradation are less toxic than the product itself.   |
| <b>Special Remarks on the Products of Biodegradation</b> | Not available.  |

**Section 13. Disposal Considerations**

|                       |  |
|-----------------------|--|
| <b>Waste Disposal</b> | Waste must be disposed of in accordance with federal, state and local environmental control regulations. |
|-----------------------|--|

**Section 14. Transport Information**

|   |  |
|---|--|
| <b>DOT Classification</b>               | CLASS 6.1: Poisonous material.   |
| <b>Identification</b>                   | UNNA: 1688 : Sodium Cacodylate PG: II  |
| <b>Special Provisions for Transport</b> | Not available.   |
| <b>DOT (Pictograms)</b>                 |  |

**Section 15. Other Regulatory Information and Pictograms**

|   |  |
|---|--|
| <b>Federal and State Regulations</b>      | <p>Connecticut hazardous material survey.: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>Pennsylvania RTK: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>Minnesota: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>Michigan critical material: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>New Jersey: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>New Jersey spill list: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>California Director's List of Hazardous Substances: Cacodylic acid, sodium salt (Listed as Arsenic compounds)</p> <p>SARA 313 toxic chemical notification and release reporting: Cacodylic acid, sodium salt (listed as Arsenic compounds, organic)</p> |
| <b>California Proposition 65 Warnings</b> | <p>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: No products were found.</p> <p>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: No products were found.</p>   |
| <b>Other Regulations</b>                  | <p>OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).</p> <p>EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.</p> <p>Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).</p> <p>China: Listed on National Inventory.</p> <p>Japan: Not listed on National Inventory (ENCS).</p> <p>Korea: Not listed on National Inventory (KECI).</p> <p>Philippines: Listed on National Inventory (PICCS).</p> <p>Australia: Not listed on AICS.</p>  |
| <b>Other Classifications</b>              | <p><b>WHMIS (Canada)</b> CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).<br/>CLASS D-2A: Material causing other toxic effects (VERY TOXIC).</p> <p><b>DSCL (EEC)</b></p>   |

Continued on Next Page

R23/25- Toxic by inhalation and if swallowed.  
 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 [\*\*\*]  
 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       | 2 |
| Fire Hazard         | 1 |
| Reactivity          | 0 |
| Personal Protection | E |

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

Health



Flammability

Reactivity

Specific hazard

WHMIS (Canada)  
(Pictograms)DSCL (Europe)  
(Pictograms)TDG (Canada)  
(Pictograms)ADR (Europe)  
(Pictograms)

## 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****MSDS Code** C3010**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 11/11/2010.

Verified by Sonia Owen.

Printed 11/11/2010.

CALL (310) 516-8000

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*