Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium Metal
Catalog Numbers: 61114-4540, S135-1LB, S206-1LB
Synonyms: Natrium; Sodium dry stick; Sodium dry powder.

Company Identification:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call:
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 7440-23-5
Chemical Name: Sodium
%
100
EINECS#: 231-132-9

Hazard Symbols: F C
Risk Phrases: 14/15 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Causes burns by all exposure routes. Contact with water or steam may cause a fire/explosion hazard. Liberates flammable hydrogen gas. Reacts violently and/or explosively with water, steam or moisture. Target Organs: Respiratory system, gastrointestinal system, eyes, skin, mucous membranes.

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns. May be harmful if absorbed through the skin.
Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed.
Inhalation: Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation 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
Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Reacts violently with water giving off flammable gas which may explode. May re-ignite after fire is extinguished.

Extinguishing Media: DO NOT USE WATER! Do NOT use CO2 or halogenated extinguishing agents. Smother with dry sand, dry clay, dry ground limestone (CaCO3), or use approved Class D extinguishers.

Autoignition Temperature: 115 deg C (239.00 deg F)
Flash Point: Not applicable.
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
NFPA Rating: ; Special Hazard: -W-

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Provide ventilation. Do not expose spill to water. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Handle under an inert atmosphere. Do not allow contact with water. Use only in a chemical fume hood.


Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Sodium: None listed

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: light gray - silver white
Odor: odorless
pH: Not applicable
Vapor Pressure: 1 mm Hg @ 440 deg C
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: 0.680cp @ 100C
Boiling Point: 883 deg C (1,621.40°F)
Freezing/Melting Point: 98 deg C (208.40°F)
Decomposition Temperature: Not available
Solubility in water: Reacts violently with water
Specific Gravity/Density: 0.9684 @ 20°C
Molecular Formula: Na
Molecular Weight: 22.99

Section 10 - Stability and Reactivity

Chemical Stability: Reacts violently with water.
Conditions to Avoid: Incompatible materials, dust generation, excess heat, exposure to moist air or water.
Incompatibilities with Other Materials Water, oxidizing agents, acids.
Hazardous Decomposition Products Hydrogen gas, sodium oxide.
Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7440-23-5: VY0686000
LD50/LC50: RTECS: Not available.
Carcinogenicity: Sodium - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: SODIUM
Hazard Class: 4.3
UN Number: UN1428
Packing Group: I
Canada TDG
Shipping Name: SODIUM
Hazard Class: 4.3
UN Number: UN1428
Packing Group: I
USA RQ: CAS# 7440-23-5: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: F C
Risk Phrases:
R 14/15 Reacts violently with water liberating extremely flammable gases.
R 34 Causes burns.
Safety Phrases:
S 6A Keep under nitrogen.
S 8 Keep container dry.
S 43D In case of fire, use sodium carbonate or dry sand (never use water).
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7440-23-5: 2

Canada

CAS# 7440-23-5 is listed on Canada's DSL List
Canadian WHMIS Classifications: B6, E, F

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

CAS# 7440-23-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7440-23-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 10/13/1998
Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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