# Material Safety Data Sheet Sodium Metal

ACC# 20850

## Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium Metal

Catalog Numbers: S135-1LB, S206-1LB

Synonyms: Natrium.
Company Identification:
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100 Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7440-23-5	Sodium	100	231-132-9

## Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: light silver solid.

**Danger!** May ignite spontaneously on exposure to moist air. Combustible solid. Causes eye burns. Causes digestive tract burns. Corrosive. Water-reactive. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. Causes respiratory tract burns.

Target Organs: None.

#### **Potential Health Effects**

Eye: May cause irreversible eye injury. Contact with eyes may cause severe irritation, and possible eye burns.

**Skin:** Causes skin burns. May cause deep, penetrating ulcers of the skin.

Ingestion: Causes gastrointestinal tract burns.

Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung 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 imme diately.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively

## 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Flammable solid. May react violently or explosively on contact with water. May be ignited by heat, sparks, and flame. 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.

Flash Point: Not applicable.

**Autoignition Temperature:** 250 deg F ( 121.11 deg C)

**Explosion Limits, Lower:**Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 3; Instability: 2; Special Hazard: -W-

#### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation. Do not expose spill to water.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water.

## Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs	
Sodium	none listed	none listed	none listed	

OSHA Vacated PELs: Sodium: No OSHA Vacated PELs are listed for this chemical.

**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.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a 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
Appearance: light silver
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: 1621 deg F

Freezing/Melting Point:208 deg F

**Decomposition Temperature:**Not available. **Solubility:** 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. Reacts violently with a broad range of materials.

Conditions to Avoid: Dust generation, exposure to moist air or water.

**Incompatibilities with Other Materials:** Water, chloroform, strong acids, sulfur dioxide, strong oxidizing agents, halogens.

**Hazardous Decomposition Products:** Irritating and toxic fumes and gases, sodium oxide.

Hazardous Polymerization: Has not been reported.

# Section 11 - Toxicological Information

RTECS#:

CAS# 7440-23-5: VY0686000

LD50/LC50: Not available.

Carcinogenicity:

CAS# 7440-23-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available. **Teratogenicity:** No information available. **Reproductive Effects:** No information available. **Mutagenicity:** No information avialable.

**Neurotoxicity:** No information available.

Other Studies:

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	SODIUM	No information available.
Hazard Class:	4.3	
UN Number:	UN1428	
Packing Group:	I	

## Section 15 - Regulatory Information

## **US FEDERAL**

#### **TSCA**

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

#### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### **CERCLA Hazardous Substances and corresponding RQs**

CAS# 7440-23-5: 10 lb final RQ; 4.54 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### **SARA Codes**

CAS # 7440-23-5: immediate, fire, reactive.

#### Section 313 No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act:**

CAS# 7440-23-5 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

None of the chemicals in this product are considered highly hazardous by OSHA. STATE

# CAS# 7440-23-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

## California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

#### **European/International Regulations**

#### **European Labeling in Accordance with EC Directives**

#### **Hazard Symbols:**

## **Risk Phrases:**

R 14/15 Reacts violently with water liberating extremely flammable gases.

R 34 Causes burns.

#### **Safety Phrases:**

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 5 Keep contents under ... (appropriate liquid to be specified by t he manufacturer).

S 8 Keep container dry.

S 43H In case of fire, use dry chemical, soda ash, lime or sand. (D

o not use water or foam).

#### WGK (Water Danger/Protection)

CAS# 7440-23-5: 2

## Canada - DSL/NDSL

CAS# 7440-23-5 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of B4, 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.

**Canadian Ingredient Disclosure List** 

## Section 16 - Additional Information

**MSDS Creation Date:** 10/13/1998 **Revision #4 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 Fisher 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 Fisher has been advised of the possibility of such damages.