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Personal Protection	

## Material Safety Data Sheet

### Cesium, 99+% MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Cesium, 99+%

**Catalog Codes:** SLC4678

**CAS#:** 7440-46-2

**RTECS:** Not applicable.

**TSCA:** TSCA 8(b) inventory: Cesium

**CI#:** Not available.

**Synonyms:** Not available.

**Chemical Name:** Not available.

**Chemical Formula:** Cs

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

CAS#	Chemical Name	Percent	EINECS/ELINCS
7440-46-2	Cesium	99+	231-155-4

**Toxicological Data on Ingredients:** Cesium LD50: Not available.

**Hazard Symbols:** F C

**Risk Phrases:** 14/15 34

#### Section 3: Hazards Identification

**EMERGENCY OVERVIEW:** Appearance: gold solid.

**Danger!:** Water-reactive. Reacts violently with water. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system effects. May cause cardiac disturbances. May ignite or explode on contact with moist air.

**Target Organs:** Central nervous system, cardiovascular system.

**Potential Health Effects:**

**Eye:** Has been reported to be noninjurious when applied to rabbit eyes.

**Skin:** No information regarding skin irritation and other potential effects was found.

**Ingestion:** May cause central nervous system effects. May cause cause autonomic disturbances, resulting in effects on the gastrointestinal tract and heart.

**Inhalation:** May cause effects similar to those described for ingestion.

**Chronic:** No information found.

#### Section 4: First Aid Measures

**Eyes:** 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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

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

**Notes to Physician:** Treat symptomatically.

#### Section 5: Fire and Explosion Data

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Can burn in a fire, releasing toxic vapors. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. May ignite or explode on contact with steam or moist air.

**Extinguishing Media:** Do NOT use water directly on fire.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

**NFPA Rating:** Not published.

#### Section 6: Accidental Release Measures

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

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

#### Section 7: Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not allow water to get into the container because of violent reaction. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use only in a chemical fume hood.

**Storage:** Keep under an argon blanket. Keep away from water. Water free area.

#### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

**Exposure Limits:**

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

**OSHA Vacated PELs:** Cesium: 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 and clothing to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

### Section 9: Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** gold

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 705 deg C @ 760.00mmHg

**Freezing/Melting Point:** 28.5 deg C

**Decomposition Temperature:** Not available.

**Solubility:** may decompose

**Specific Gravity/Density:** 1.8730g/cm<sup>3</sup>

**Molecular Formula:** Cs

**Molecular Weight:** 132.91

### Section 10: Stability and Reactivity Data

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Strong oxidants.

**Incompatibilities with Other Materials:** Sulfur, oxidizing agents, acids, alcohols, halogens, plastics, water, oxygen.

**Hazardous Decomposition Products:** Irritating and toxic fumes and gases.

**Hazardous Polymerization:** Has not been reported.

### Section 11: Toxicological Information

**RTECS#:**

**CAS#:** 7440-46-2: FK9225000

**LD50/LC50:** Not available.

**Carcinogenicity:** CAS# 7440-46-2: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

## Section 12: Ecological Information

## Section 13: Disposal Considerations

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

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

## Section 14: Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	CESIUM				No information available.
<b>Hazard Class:</b>	4.3				
<b>UN Number:</b>	UN1407				
<b>Packing Group:</b>	I				

## Section 15: Other Regulatory Information

**US FEDERAL:**

**TSCA:** CAS# 7440-46-2 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.

**SARA:**

**CERCLA Hazardous Substances and corresponding RQs:** None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances:** None of the chemicals in this product have a TPQ.

**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 depleters. This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:** None of the chemicals in this product are listed as Hazardous Substances 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.

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

**STATE:** CAS# 7440-46-2 can be found on the following state right to know lists: New Jersey. 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:** F C

**Risk Phrases:** R 14/15 Reacts violently with water liberating extremely flammable gases. R 34 Causes burns.

**Safety Phrases:** S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 8 Keep container dry. S 43A In case of fire, use dry chemical (never use water).

**WGK (Water Danger/Protection):** CAS# 7440-46-2: No information available.

**Canada - DSL/NDSL:** CAS# 7440-46-2 is listed on Canada's NDSL List.

**Canada - WHMIS:** This product does not have a WHMIS classification.

**Canadian Ingredient Disclosure List:**

**Exposure Limits:**

**HMIS (U.S.A.):**

**Health Hazard:** 3

**Fire Hazard:** 4

**Reactivity:** 3

**Personal Protection:**

**National Fire Protection Association (U.S.A.):**

**Health:** -

**Flammability:** -

**Reactivity:** -

**Specific hazard:**

**Protective Equipment:**

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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