



Super Conductor Materials, Inc.

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Chemtrec: (800) 424-9300
Poison Center: (800) 562-8236
Revision Date: January 8th, 2019

SAFETY DATA SHEET

Identity: Cesium Iodide

Formula: CsI

SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 259.81

CAS #	OSHA PEL	ACGIH TLV	%
7789-17-5	N/A	N/A	0.0-100.0%

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 1280.00°C

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 626.00°C

Specific gravity (water=1): 4.510 gm/cc

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Soluble

Appearance and odor: White powder and pieces, no order

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Non-flammable

Explosive Limits: LEL: N/A

UEL: N/A

Extinguishing Media: Use suitable extinguishing agent for surrounding material and type of fire

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazards:

When heated to decomposition, cesium iodide may emit toxic fumes of cesium and iodine

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): None

Incompatibility: Strong acids and bases



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Hazardous Decomposition or Byproducts: cesium and iodine

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): none

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Cesium is quite similar to potassium in its elemental state. It has been shown, however to have pronounced physiological action in experimentation with animals. Hyper-irritability, including marked spasms has been shown to follow replacing potassium with cesium. Iodides are similar in toxicity to bromides. It is generally very soluble in water and is easily absorbed into the body. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Signs and Symptoms of Overexposure:

Inhalation: May cause dry, red throat, coughing and loss of appetite. Iodine may cause runny nose, headache, irritation of mucous membranes, weakness, loss of weight and general depression

Ingestion: Cesium toxicity may cause diarrhea, stomach cramps, measles like eruptions, liver disorders, neuroendocrine disturbances, and neuromuscular toxicity leading to irritability and convulsion

Skin: May cause redness, burning, itching, pimples, boils, black and blue spots, hives and blisters

Eye: May cause redness, burning, itching and watering

Health Hazards (Acute and Chronic):

Inhalation:

Acute: May cause irritation to the upper respiratory system and iodism

Chronic: May cause iodism

Ingestion:

Acute: Moderately toxic by ingestion

Chronic: May cause cesium poisoning

Skin:

Acute: May cause irritation

Chronic: May cause dermatitis

Eye:

Acute: May cause severe irritation

Chronic: No chronic health effects recorded

Target Organs: May affect upper respiratory system and skin

Carcinogenicity: NTP? No

IARC Monographs? No

OSHA Regulated? No

Medical Conditions Aggravated by Exposure: Pre-existing respiratory disorders

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

Eye: medical attention



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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious rubber gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established