



Super Conductor Materials, Inc.

391 Spook Rock Industrial Park, Suffern, NY 10901 · 845.368.0240 · Fax 845.368.0250 · www.scm-inc.com

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

SAFETY DATA SHEET

Identity: Indium oxide

Formula: In₂O₃

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: 277.64

| CAS # | OSHA PEL | ACGIH TLV | % |
|-----------|----------|---------------------|-------------|
| 1312-43-2 | NE | .1mg/m ³ | 0.0- 100.0% |

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

| | |
|--------------------------------------|---|
| Boiling Point: 850.00°C | Specific Gravity (H ₂ O=1): 7.18 gm/cc |
| Melting Point: 1900.00°C – 1920.00°C | Vapor Pressure (vs. air or mmHg): N/A |
| Evaporation Rate: N/A | Vapor Density (vs. air=1): N/A |
| Solubility in water: Insoluble | Flash Point: N/A |

Appearance and odor: Yellow to metallic pieces and powder, no odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Unknown *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:

Indium Oxide may emit toxic fumes if involved in a fire

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): None recorded



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Incompatibility: None recorded

Hazardous Decomposition or Byproducts: May yield toxic fumes of constituents upon overheating

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): None recorded

SECTION VI - HEALTH HAZARD DATA

Route of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: No

Indium is a poison by subcutaneous route. It affects the liver, heart, kidneys and the blood. Teratogenic effects. Inhalation of indium compounds may cause damage to the respiratory system; hydrated indium oxide is a poison by intravenous route. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Signs and Symptoms of Overexposure:

Inhalation: May cause a red, dry throat, coughing, sneezing and shortness of breath.

Ingestion: May cause nausea, vomiting and stomach discomfort.

Skin: May cause redness and itching.

Eye: May cause redness, itching, and inflammation and watering.

Health Hazards (Acute and Chronic):

Inhalation:

Acute: May cause irritation to the mucous membranes and damage to the respiratory system.

Chronic: May cause pneumonitis

Ingestion:

Acute: May cause irritation to the gastrointestinal tract.

Chronic: May affect the heart, liver, kidneys and blood.

Skin:

Acute: May cause irritation.

Chronic: No chronic health effects recorded.

Eye:

Acute: May cause irritation.

Chronic: No chronic health effects recorded.

Target Organs: May affect the lungs, heart, kidneys and blood

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: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek 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:

Indium is a rare metal. Scrap or spent materials may have value. Contact your supplier for possible recycling. Otherwise 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 or below the TLV

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