

Material Safety Data Sheet

Identity: Indium

Formula: In

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM 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: 114.818

| CAS # | OSHA PEL | ACGIH TLV | % |
|-----------|----------------------|----------------------|--------|
| 7440-74-6 | 0.1mg/m ³ | 0.1mg/m ³ | 0-100% |

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 2072.0 °C

Melting Point: 156.6 °C

Evaporation rate: N/A

Solubility in water: Insoluble

Specific Gravity (H₂O=1): 7.31g/cm³

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

Vapor Density (vs. air=1): N/A

Percent Volatile: N/A

Appearance and odor: Silver-white metals, soft, malleable and ductile, no odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Flash Point: N/A

Method Used: N/A

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. Organic fumes and toxic fumes may form at elevated temperatures

Unusual Fire and Explosion Hazards: None

SECTION V - REACTIVITY DATA

Stability: Stable*Conditions to Avoid (stability):* N/A

Incompatibility: Acids, sulfur, oxidizing agents. Ignites and incandesces on heating with sulfur

Hazardous Decomposition or Byproducts: Organic fumes and toxic fumes may form at elevated temperatures

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): None established

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| SECTION VI - HEALTH HAZARD DATA |
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Routes of entry: I Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes
Other? No

Health Hazards (Acute and Chronic):

Inhalation:

Acute: May cause local irritation to respiratory system including shortness of breath and sore throat

Chronic: May cause headaches, nausea, abdominal pain, fatigue, and pain in legs, arms, and joints.

Ingestion:

Acute: No acute health effects recorded

Chronic: May cause headaches, nausea, abdominal pain, fatigue, and pain in legs, arms, and joints.

Skin:

Acute: Mild skin irritation. Chronic:

Molten will cause burns

Eye:

Acute: May cause irritation

Chronic: Severe damage can occur from hot molten being splashed into the eyes

Target Organs: Respiratory system. Damage to kidneys and liver may occur from injections of indium compounds.

Carcinogenicity: N/A

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

If molten, allow to cool and solidify. 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. Do not sweep. 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.

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| SECTION VIII - CONTROL MEASURES |
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Protective Equipment Summary (Hazard Label Information):

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

Ventilation:

Local Exhaust: To control any air contaminants

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