

Material Safety Data Sheet

Identity: Indium oxide

Formula: In₂O₃

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: 277.64

CAS #	OSHA PEL	ACGIH TLV	%
1312-43-2	N/A	.1mg/m ³	100

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 850 °C

Melting Point: 1910 °C

Evaporation Rate: N/A

Solubility in water: Insoluble

Specific Gravity (H₂O=1): 7.179

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

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

Percent Volatile: N/A

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

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Flash Point: N/A*Flammable Limits:* Not Flammable*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: May yield toxic fumes of constituents upon overheating

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): None established

Incompatibility: None established

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

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): None established

SECTION VI - HEALTH HAZARD DATA

Inhalation:

Acute: May cause respiratory irritation

Chronic: Severe exposure could cause pulmonary damage

Ingestion:

Acute: Harmful if swallowed. May cause nausea

Chronic: Kidney and liver damage has been reported on limited animal testing

Skin:

Acute: Mildly irritating

Chronic: No chronic effects recorded

Eye:

Acute: May cause irritation, watering and redness

Chronic: No chronic health effects recorded

Carcinogenicity: NTP? No

IARC Monographs? No

OSHA Regulated? No

Medical Conditions Aggravated by Exposure: Pre-existing respiratory disorders and/or allergies

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

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 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