



| Health                 | 2 |
|------------------------|---|
| Fire                   | 2 |
| Reactivity             | 0 |
| Personal<br>Protection | E |

# Material Safety Data Sheet Indium MSDS

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

Product Name: Indium

Catalog Codes: SLI1033

CAS#: 7440-74-6

RTECS: NL1050000

TSCA: TSCA 8(b) inventory: Indium

CI#: Not applicable.

Synonym:

Chemical Name: Indium

Chemical Formula: In

**Contact Information:** 

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Houston, Texas 77396

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International Sales: 1-281-441-4400

Order Online: 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:**

| Name   | CAS#      | % by Weight |
|--------|-----------|-------------|
| Indium | 7440-74-6 | 100         |

Toxicological Data on Ingredients: Indium LD50: Not available. LC50: Not available.

## **Section 3: Hazards Identification**

### **Potential Acute Health Effects:**

Hazardous in case of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), .

#### **Potential Chronic Health Effects:**

Hazardous in case of ingestion.

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: PROVEN

The substance is toxic to blood, kidneys, the reproductive system, liver, heart, upper respiratory tract, skin, eyes.

Repeated or prolonged exposure to the substance can produce target organs damage.

#### **Section 4: First Aid Measures**

Eye Contact: No known effect on eye contact, rinse with water for a few minutes.

#### **Skin Contact:**

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

#### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

#### Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

# **Section 5: Fire and Explosion Data**

Flammability of the Product: Flammable.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not available.

#### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

## **Fire Fighting Media and Instructions:**

Flammable solid.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure

build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

**Special Remarks on Explosion Hazards:** Not available.

# **Section 6: Accidental Release Measures**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

#### Large Spill:

Flammable solid.

Stop leak if without risk. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent

entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

# **Section 7: Handling and Storage**

#### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust.

## Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

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

#### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

## Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### **Exposure Limits:**

TWA: 0.1 (mg/m3) from OSHA (PEL)

TWA: 0.1 (mg/m3) from ACGIHConsult local authorities for acceptable exposure limits.

# Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Odorless.

Taste: Not available.

Molecular Weight: 114.82 g/mole

Color: Not available.

pH (1% soln/water): Not applicable.

Boiling Point: 2000°C (3632°F)

**Melting Point:** 156.17°C (313.1°F)

Critical Temperature: Not available.

**Specific Gravity:** 7.31 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

**Dispersion Properties:** Is not dispersed in cold water, hot water.

Solubility: Insoluble in cold water, hot water.

# Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

Instability Temperature: Not available.Conditions of Instability: Not available.

**Incompatibility with various substances:** Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

# **Section 11: Toxicological Information**

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

#### **Toxicity to Animals:**

LD50: Not available. LC50: Not available.

## **Chronic Effects on Humans:**

**DEVELOPMENTAL TOXICITY: PROVEN** 

The substance is toxic to blood, kidneys, the reproductive system, liver, heart, upper respiratory tract, skin, eyes.

#### Other Toxic Effects on Humans:

Hazardous in case of ingestion, of inhalation (lung irritant).

Slightly hazardous in case of skin contact (irritant), .

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## **Section 12: Ecological Information**

**Ecotoxicity:** Not available.

BOD5 and COD: Not available.

## **Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

# **Section 13: Disposal Considerations**

**Waste Disposal:** 

# **Section 14: Transport Information**

DOT Classification: CLASS 4.1: Flammable solid.

Identification: : Metal Powder, Flammable, n.o.s.(Indium Powder) : UN3089 PG: III

Special Provisions for Transport: Not available.

# **Section 15: Other Regulatory Information**

## Federal and State Regulations:

Rhode Island RTK hazardous substances: Indium

Pennsylvania RTK: Indium

Florida: Indium Minnesota: Indium

Massachusetts RTK: Indium

New Jersey: Indium

TSCA 8(b) inventory: Indium

#### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

#### Other Classifications:

## WHMIS (Canada):

CLASS B-4: Flammable solid.

CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL** (**EEC**): R37- Irritating to respiratory system.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: E

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

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

## **Protective Equipment:**

Gloves.
Lab coat.
Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Safety glasses.

## **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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