

SAFETY DATA SHEET

Section 1: Identification

Product name: Indium(III) chloride
Product use: For laboratory research purposes.
Supplier: Trace Sciences International
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Section 2: Hazard(s) Identification

2.1 GHS Classification

Skin corrosion (Category 1C), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - repeated exposure, Inhalation (Category 1), Lungs, H372
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 3), H412

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s):

H314 Causes severe skin burns and eye damage.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s):

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P314 Get medical advice/ attention if you feel unwell.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition/ Information on Ingredients

Formula : InCl₃
Molecular Weight : 221.18 g/mol

Material	CAS-No.	EC-No.	Index-No.	Concentration
Indium Chloride	10025-82-8	233-043-0	-	<=100%

Section 4: First-Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move person out of dangerous area if safe to do so.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at least 15 minutes. Use chemical shower if available. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contacts if possible.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire-Fighting Measures

5.1 Conditions of flammability

Not flammable or combustible.

5.2 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.3 Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Hydrogen chloride gas, indium/indium oxides

5.4 Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.5 Further information

No data available

Section 6: Accidental Release Measures

6.1 Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage

Moisture sensitive.

Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

8.1 Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Indium trichloride	10025-82-8	TWA	0.1 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	0.1 mg/m ³	Canada. Ontario OELs
		TWA	0.1 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	0.1 mg/m ³	Canada. British Columbia OEL

Remarks

No data available

8.2 Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Specific engineering controls

Use mechanical exhaust or laboratory fume hood to avoid exposure.

Section 9: Physical and Chemical Properties

Appearance

Form	Powder, Crystals
Colour	White, Yellow

Safety Data

pH	No data available
Melting point/freezing point	583 °C (1081 °F)
Boiling point	655 °C (1211 °F)
Flash point	Not applicable
Flammability (solid, gas)	No data available
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Density	3.24 at 20 °C (68 °F)
Water solubility	1,000 g/l at 20 °C (68 °F) - soluble
Partition coefficient: n-octanol/water	No data available
Relative vapour density	No data available
Odour	No data available
Odour Threshold	No data available
Evaporation rate	No data available

Section 10: Stability and Reactivity

10.1 Chemical stability

Stable under recommended storage conditions

10.2 Possibility of hazardous reactions

No data available

10.3 Conditions to avoid

No data available

10.4 Materials to avoid

Strong acids, strong oxidizing agents

10.5 Hazardous decomposition products

See section 5

Section 11: Toxicological Information

Acute toxicity

Oral

LD50 Oral - Rat - female - > 2,000 mg/kg
(OECD Test Guideline 423)

Inhalation

No data available

Dermal

No data available

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)
Result: Corrosive after 1 to 4 hours of exposure
(OECD Test Guideline 431)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: (ECHA)

Test Type: Micronucleus test
Species: Mouse
Cell type: Red blood cells (erythrocytes)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
Remarks: The value is given in analogy to the following substances: Indium trihydroxide

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

Inhalation - Causes damage to organs through prolonged or repeated exposure – Lungs

Aspiration hazard

No data available

Signs and Symptoms of Exposure

Cough, shortness of breath, headache, nausea, vomiting.

Additional Information

RTECS: NL1400000

Section 12: Ecological Information

12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates Static test LC50 - Daphnia magna (Water flea) - > 455.5 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae Static test ErC50 - Pseudokirchneriella subcapitata - 1.85 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria Static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209)

Toxicity to fish (Chronic toxicity) 25 mg/l - 14 d (OECD Test Guideline 204)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test NOEC - Daphnia magna (Water flea) - 8.95 mg/l - 21 d (OECD Test Guideline 211)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

Section 13: Disposal Considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

IATA

UN number: UN3260 Class: 8 Packing group: III
Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Indium trichloride)

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

Section 16: Other Information

Further information

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for his or her particular purpose(s).

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Date Prepared: February 10, 2025