

# MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Indium (III) chloride tetrahydrate  
**CAS #:** 22519-64-8  
**FORMULA:** InCl<sub>3</sub>.4H<sub>2</sub>O  
**SYNONYM:** Indium trichloride tetrahydrate

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	22519-64-8	100	0.1mg/m <sup>3</sup> (as In)	no data

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** Severe irritant to skin and eyes. Material hydrolyzes in contact with moisture releasing hydrochloric acid and under some conditions corrosive hydrogen chloride vapors. Possible risk of harm to the unborn child.

**PRIMARY ROUTES OF EXPOSURE:** Ingestion, inhalation, skin, eyes

**EYE CONTACT:** Severe irritant to the eyes.

**SKIN CONTACT:** Causes severe irritation of the skin.

**INHALATION:** Forms hydrochloric acid in the presence of moisture. Inhalation of vapors leads to irritation of the respiratory tract.

**INGESTION:** Severe irritation of the Gastrointestinal system may occur.

**CHRONIC HEALTH EFFECTS:** No information available on long-term chronic effects.

**ACUTE HEALTH EFFECTS:** Irritating to skin, eyes and respiratory tract. May Cause eye and skin burns, breathing difficulty and pulmonary edema. Possible risk of harm to the unborn child.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

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## **SECTION 5                      Firefighting Measures**

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**FLASH POINT:** not applicable

**AUTO IGNITION TEMPERATURE:** none

**EXPLOSION LIMITS:** none

**EXTINGUISHING MEDIUM:** none required

**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** If involved in a fire this material may emit toxic chlorine and hydrochloric acid fumes.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** No unusual fire or explosion hazards.

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## **SECTION 6                      Accidental Release Measures**

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**SPILL AND LEAK PROCEDURES:** To avoid raising dust, small spills can be mixed with powdered sodium bicarbonate, lime, or calcium carbonate and swept up.

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## **SECTION 7                      Handling and Storage**

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**HANDLING AND STORAGE:** Store material in a tightly sealed bottle away from moisture. If possible, handle material in an efficient fume hood. Prolonged exposure to the atmosphere may lead to degradation of the product.

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## **SECTION 8                      Exposure Controls and Personal Protection**

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical-resistant.

**VENTILATION:** If possible, handle the material in an efficient fume hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

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## **SECTION 9                      Physical and Chemical Properties**

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**COLOR AND FORM:** white xtl.

**MOLECULAR WEIGHT:** 221.18 (293.26)

**MELTING POINT (DEG. C.):** none

**BOILING POINT:** no data

**VAPOR PRESSURE:** not applicable

**SPECIFIC GRAVITY:** no data

**SOLUBILITY IN WATER:** very soluble

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## **SECTION 10                    Stability and Reactivity**

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**STABILITY:** air and moisture stable

**HAZARDOUS POLYMERIZATION:** no hazardous polymerization

**CONDITIONS TO AVOID:** contact with moisture  
**INCOMPATIBILITY:** water, mineral acids and active metals  
**DECOMPOSITION PRODUCTS:** Hydrochloric acid and indium oxides.

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## **SECTION 11 Toxicological Information**

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**RTECS DATA:** Intraperitoneal (mouse); LD50: 12 mg/kg.  
**MUTAGENIC EFFECTS:** no data  
**TETRATOGENIC EFFECTS:** no data  
**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

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## **SECTION 12 Ecological Information**

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**ECOLOGICAL INFORMATION:** No information available

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## **SECTION 13 Disposal Considerations**

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## **SECTION 14 Transportation Information**

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Non-hazardous

Non-hazardous

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## **SECTION 15 Regulatory Information**

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**TSCA:** Not listed in the TSCA inventory  
**SARA (TITLE 313):** Title compound not listed

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## **SECTION 16 Other Information**

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