

# Material Safety Data Sheet

## Tin(II) chloride

ACC# 21840

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Tin(II) chloride**Catalog Numbers:** AC196980000, AC196980250, AC196981000, AC196985000, T141-100, T141-500**Synonyms:** Stannous chloride.**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7772-99-8	Tin(II) chloride	98+	231-868-0

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystalline powder.

**Danger!** Causes burns by all exposure routes. Harmful if swallowed. Hygroscopic (absorbs moisture from the air). May cause sensitization by skin contact.**Target Organs:** Blood, kidneys, liver, respiratory system, gastrointestinal system, eyes, skin.**Potential Health Effects****Eye:** Causes eye burns.**Skin:** Causes skin burns. May be harmful if absorbed through the skin. May cause sensitization by skin contact.**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns. Inorganic tin salts may cause systemic toxic effects on the central nervous system, heart, and**Inhalation:** Causes chemical burns to the respiratory tract. May be harmful if inhaled.**Chronic:** Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. Adverse reproductive effects have been reported in animals. Chronic exposure may cause blood effects. Repeated or prolonged exposure may cause allergic reactions in sensitive individuals. Animal studies have reported the development of tumors.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 0; Instability: 1

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self-contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

#### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tin(II) chloride	2 mg/m <sup>3</sup> TWA (as Sn, except Tin hydride) (listed under Tin inorganic compounds).	2 mg/m <sup>3</sup> TWA (as Sn, except Tin oxide) (listed under Tin inorganic compounds).	2 mg/m <sup>3</sup> TWA (as Sn, except oxides) (listed under Tin inorganic compounds).

**OSHA Vacated PELs:** Tin(II) chloride: No OSHA Vacated PELs are listed for this chemical.

#### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white

**Odor:** weak odor

**pH:** 2 (10% aq.sol.)

**Vapor Pressure:** Negligible.

**Vapor Density:** Not applicable.

**Evaporation Rate:** Negligible.

**Viscosity:** Not available.

**Boiling Point:** 652 deg C @ 760 mmHg

**Freezing/Melting Point:** 246 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:** 3.950

**Molecular Formula:** Cl<sub>2</sub>Sn

**Molecular Weight:** 189.60

## Section 10 - Stability and Reactivity

**Chemical Stability:** Hygroscopic: absorbs moisture or water from the air.

**Conditions to Avoid:** Incompatible materials, dust generation, heating to decomposition, exposure to moist air or water.

**Incompatibilities with Other Materials:** Metals, strong oxidizing agents, strong bases, bromine trifluoride, ethylene oxide, nitrates, potassium, hydrogen peroxide, sodium, azo, diazo, and hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl hydrazine), water reactive substances (e.g. acetic anhydride, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane), metal nitrates.

**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, carbon dioxide, tin/tin

oxides.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7772-99-8: XP8700000

**LD50/LC50:**

CAS# 7772-99-8:

Oral, mouse: LD50 = 250 mg/kg;

Oral, rabbit: LD50 = 10 gm/kg;

Oral, rat: LD50 = 700 mg/kg;

**Carcinogenicity:**

CAS# 7772-99-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Tumorigenic effects have been reported in experimental animals.

**Teratogenicity:** Teratogenic effects have occurred in experimental animals.

**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals.

**Mutagenicity:** Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Water flea Daphnia: EC50 = 19.5 mg/L; 48 Hr; UnspecifiedFish: Pseudomonas putida: ; ; No data available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	<b>US DOT</b>	<b>Canada TDG</b>
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<b>Shipping Name:</b>	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (Tin (II) chloride)	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (Tin (II)
<b>Hazard Class:</b>	8	8
<b>UN Number:</b>	UN3260	UN3260
<b>Packing Group:</b>	III	III
<b>Additional Info:</b>		chloride)

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7772-99-8 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 7772-99-8: immediate, delayed, fire.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 7772-99-8 can be found on the following state right to know lists: New Jersey, Minnesota, (listed as Tin inorganic compounds), Massachusetts.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

C

**Risk Phrases:**

- R 22 Harmful if swallowed.
- R 34 Causes burns.
- R 43 May cause sensitization by skin contact.

**Safety Phrases:**

- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**

CAS# 7772-99-8: 1

**Canada - DSL/NDSL**

CAS# 7772-99-8 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7772-99-8 is listed on the Canadian Ingredient Disclosure List.

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 6/24/1999**Revision #7 Date:** 1/22/2008

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