

# Material Safety Data Sheet

## Tin (II) Chloride Dihydrate

ACC# 21850

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Tin (II) Chloride Dihydrate**Catalog Numbers:** AC196800000, AC196800050, AC196805000, AC222460000, AC222660000, AC222661000, AC222665000, AC424480000, AC424480050, AC424485000, AC9544168, AC9544192, AC424485, AC4244810, S80206, S802061, T142-100, T142-3, T142-500, T142500LC, T163-250, T163-500**Synonyms:** Stannous chloride dihydrate; Stannochlor; Stannous chloride dihydrate**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
10025-69-1	Tin (II) Chloride Dihydrate	>98	unlisted

**Hazard Symbols:** C**Risk Phrases:** 22 34

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless to white solid. **Danger!** Causes eye and skin burns. Moisture sensitive. Causes digestive and respiratory tract burns. May cause blood abnormalities. May cause liver and kidney damage. Harmful if swallowed.

**Target Organs:** Respiratory system, eyes, skin.**Potential Health Effects****Eye:** Causes eye burns.**Skin:** Causes skin burns. Causes redness and pain. May be harmful if absorbed through the skin.**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns. Exposure may cause anemia and other blood abnormalities. May cause headache, nausea, fatigue, and dizziness. Inorganic tin salts may cause systemic effects on the central nervous system, heart and liver.**Inhalation:** Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract. May cause effects similar to those described for ingestion. 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 effects similar to those of acute exposure.

## 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. Do NOT allow victim to rub eyes or keep eyes closed.

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

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

**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 breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**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:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

**Storage:** Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture.

## 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 adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tin (II) Chloride Dihydrate	none listed	none listed	none listed

**OSHA Vacated PELs:** Tin (II) Chloride Dihydrate: 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 minimize contact with skin.

**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 a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** colorless to white

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Negligible.

**Vapor Density:** Not applicable.

**Evaporation Rate:** negligible

**Viscosity:** Not available.

**Boiling Point:** decomposes

**Freezing/Melting Point:** 100 deg F

**Decomposition Temperature:** Not available.

**Solubility:** decomposes in water

**Specific Gravity/Density:** 2.7

**Molecular Formula:** SnCl<sub>2</sub>.2H<sub>2</sub>O

**Molecular Weight:** 225.6228

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. May decompose on exposure to moist air or water. Moisture sensitive.

**Conditions to Avoid:** Moisture, heating to decomposition.

**Incompatibilities with Other Materials:** Metals, strong oxidizing agents, strong reducing agents, strong acids, strong bases, bromine trifluoride, ethylene oxide, potassium, hydrogen peroxide, sodium, moisture, calcium carbide, hydrazine hydrate, organic nitrates.

**Hazardous Decomposition Products:** Hydrogen chloride, chlorine, tin/tin oxides.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 10025-69-1: XP8850000

**LD50/LC50:**

CAS# 10025-69-1:

Oral, rat: LD50 = 2274.6 mg/kg;

**Carcinogenicity:**

CAS# 10025-69-1: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Effects on Embryo or Fetus - fetal death.; Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Specific Developmental Abnormalities - craniofacial (including nose and tongue).

**Reproductive Effects:** Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Maternal Effects - other effects and Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants). Reproductive - Effects on Embryo or Fetus - fetal death

**Neurotoxicity:** No data available.

**Mutagenicity:** DNA Damage: Human, Leukocyte = 10 umol/L.; DNA Damage: Hamster, Ovary = 50 umol/L.

**Other Studies:** No data available.

## Section 12 - Ecological Information

No information available.

## 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

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (Tin (II) chloride dihydrate)				CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (Tin II chloride dihydrate)
<b>Hazard Class:</b>	8				8

<b>UN Number:</b>	UN3260	UN3260
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 10025-69-1 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

#### 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.

#### SARA

#### 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 # 10025-69-1: acute, chronic, flammable.

#### 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# 10025-69-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.  
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.

#### 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# 10025-69-1: No information available.

### **Canada - DSL/NDSL**

None of the chemicals in this product are listed on the DSL or NDSL list. **Canada - WHMIS**

This product has a WHMIS classification of E.

### **Canadian Ingredient Disclosure List**

CAS# 10025-69-1 is listed on the Canadian Ingredient Disclosure List.

### **Exposure Limits**

CAS# 10025-69-1: OEL-AUSTRALIA:TWA 2 mg(Sn)/m3 OEL-BELGIUM:TWA 2 mg (Sn)/m3 OEL-DENMARK:TWA 2 mg(Sn)/m3 OEL-FINLAND:TWA 2 mg(Sn)/m3 OEL -GERMANY:TWA 2 mg(Sn)/m3 OEL-HUNGARY:TWA 1 mg(Sn)/m3;STEL 2 mg(Sn)/m3 ;Skin OEL-THE NETHERLANDS:TWA 2 mg(Sn)/m3 OEL-THE PHILIPPINES:TWA 2 mg(Sn)/m3 OEL-SWITZERLAND:TWA 2 mg(Sn)/m3;STEL 4 mg(Sn)/m3 OEL-THAIL AND:TWA 2 mg(Sn)/m3 OEL-UNITED KINGDOM:TWA 5 mg(Sn)/m3;STEL 10 mg(Sn) /m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## Section 16 - Additional Information

**MSDS Creation Date:** 6/25/1999

**Revision #5 Date:** 8/30/2004

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