

# Safety Data Sheet

## Tin (II) Chloride, Dihydrate

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Tin (II) Chloride, Dihydrate  
**Recommended Use:** Science education applications  
**Synonyms:** Stannous Chloride Dihydrate, Tin (II) Chloride 2-Hydrate  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.

**GHS Classification:**

Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity - Oral Category 4

### Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u>         | <u>CAS #</u> | <u>%</u> |
|------------------------------|--------------|----------|
| Tin (II) Chloride, Dihydrate | 10025-69-1   | 100      |

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.  
**Ingestion:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Hydrogen chloride, Tin Compounds

### Section 6 Spill or Leak Procedures

Vacuum or sweep up material and place in a disposal container Do not allow the spilled product to enter public drainage system or open waterways.

# Safety Data Sheet

## Section 7 Handling and Storage

**Handling:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place. Aqueous solutions are acidic; use only in corrosion-resistant vessels. Avoid contact with skin and eyes.

**Storage:** Store locked up. Suitable for any general chemical storage.

**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

| <u>Chemical Name</u>         | <u>ACGIH</u>  |               | <u>OSHA PEL</u>                                |               |
|------------------------------|---|---------------|--|---------------|
|                              | <u>(TWA)</u>  | <u>(STEL)</u> | <u>(TWA)</u>                                   | <u>(STEL)</u> |
| Tin (II) Chloride, Dihydrate | 2 mg/m <sup>3</sup> TWA (except Tin hydride, as Sn) | N/A           | 2 mg/m <sup>3</sup> TWA (except oxides, as Sn) | N/A           |

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** Nitrile

## Section 9 Physical Data

|   |   |
|---|---|
| <b>Formula:</b> SnCl <sub>2</sub> * 2H <sub>2</sub> O | <b>Vapor Pressure:</b> N/A                          |
| <b>Molecular Weight:</b> 225.63 g/mol                 | <b>Evaporation Rate (BuAc=1):</b> N/A               |
| <b>Appearance:</b> White to Gray Solid                | <b>Vapor Density (Air=1):</b> N/A                   |
| <b>Odor:</b> No data available                        | <b>Specific Gravity:</b> 2.710                      |
| <b>Odor Threshold:</b> No data available              | <b>Solubility in Water:</b> Soluble                 |
| <b>pH:</b> No data available                          | <b>Log Pow (calculated):</b> No data available      |
| <b>Melting Point:</b> 37 - 38 C                       | <b>Autoignition Temperature:</b> No data available  |
| <b>Boiling Point:</b> 652 C                           | <b>Decomposition Temperature:</b> No data available |
| <b>Flash Point:</b> No data available                 | <b>Viscosity:</b> No data available                 |
| <b>Flammable Limits in Air:</b> N/A                   | <b>Percent Volatile by Volume:</b> N/A              |

## Section 10 Reactivity Data

**Reactivity:** No data available

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Caustics (bases), Strong acids, Strong oxidizing agents, Strong reducing agents

**Hazardous Decomposition Products:** Tin Compounds, Hydrogen chloride

**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.

**Symptoms (Acute):** N/A

**Delayed Effects:** No data available

# Safety Data Sheet

## Acute Toxicity:

|  |                                 |  |                                      |  |
|--|---------------------------------|--|--------------------------------------|--|
| <b>Chemical Name</b><br>Tin (II) Chloride, Dihydrate | <b>CAS Number</b><br>10025-69-1 | <b>Oral LD50</b><br>Oral LD50 Mouse<br>250 mg/kg<br>Oral LD50 Rat 700<br>mg/kg | <b>Dermal LD50</b><br>Not determined | <b>Inhalation LC50</b><br>Not determined |
|--|---------------------------------|--|--------------------------------------|--|

## Carcinogenicity:

|   |                                 |                           |                          |                           |
|---|---------------------------------|---------------------------|--------------------------|---------------------------|
| <b>Chemical Name</b><br>No data available | <b>CAS Number</b><br>10025-69-1 | <b>IARC</b><br>Not listed | <b>NTP</b><br>Not listed | <b>OSHA</b><br>Not listed |
|---|---------------------------------|---------------------------|--------------------------|---------------------------|

## Chronic Effects:

|                              |  |
|------------------------------|--|
| <b>Mutagenicity:</b>         | No evidence of a mutagenic effect.                                     |
| <b>Teratogenicity:</b>       | No evidence of a teratogenic effect (birth defect).                    |
| <b>Sensitization:</b>        | No evidence of a sensitization effect.                                 |
| <b>Reproductive:</b>         | No evidence of negative reproductive effects.                          |
| <b>Target Organ Effects:</b> |  |
| <b>Acute:</b>                | See Section 2  |
| <b>Chronic:</b>              | Not listed as a carcinogen by IARC, NTP or OSHA., Mutation data cited. |

## Section 12 Ecological Data

|                               |   |
|-------------------------------|---|
| <b>Overview:</b>              | This material is not expected to be harmful to the ecology. |
| <b>Mobility:</b>              | No data   |
| <b>Persistence:</b>           | No data   |
| <b>Bioaccumulation:</b>       | No data   |
| <b>Degradability:</b>         | No data   |
| <b>Other Adverse Effects:</b> | No data   |

|                             |                                 |                     |
|-----------------------------|---------------------------------|---------------------|
| <b>Chemical Name</b><br>N/A | <b>CAS Number</b><br>10025-69-1 | <b>Eco Toxicity</b> |
|-----------------------------|---------------------------------|---------------------|

## Section 13 Disposal Information

|                                |   |
|--------------------------------|---|
| <b>Disposal Methods:</b>       | Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. |
| <b>Waste Disposal Code(s):</b> | Not Determined  |

## Section 14 Transport Information

|   |   |
|---|---|
| <b>Ground - DOT Proper Shipping Name:</b><br>UN number: 3260 Class: 8 Packing group: III Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate) Marine pollutant: No Poison Inhalation Hazard: No | <b>Air - IATA Proper Shipping Name:</b><br>UN number: 3260 Class: 8 Packing group: III Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate) |
|---|---|

## Section 15 Regulatory Information

|                     |  |
|---------------------|--|
| <b>TSCA Status:</b> | A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only. |
|---------------------|--|

| <b>Chemical Name</b> | <b>CAS Number</b> | <b>§ 313 Name</b> | <b>§ 304 RQ</b> | <b>CERCLA RQ</b> | <b>§ 302 TPQ</b> | <b>CAA 112(2) TQ</b> |
|----------------------|-------------------|-------------------|-----------------|------------------|------------------|----------------------|
| No data available    | 10025-69-1        | No                | No              | No               | No               | No                   |

## Section 16 Additional Information

**Revised: 09/03/2014**                      **Replaces: 08/27/2014**                      **Printed: 09-11-2014**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

# Safety Data Sheet

## Glossary

|        |   |      |   |
|--------|---|------|---|
| ACGIH  | American Conference of Governmental Industrial Hygienists             | NTP  | National Toxicology Program                   |
| CAS    | Chemical Abstract Service Number                                      | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL  | Permissible Exposure Limit                    |
| DOT    | U.S. Department of Transportation                                     | ppm  | Parts per million                             |
| IARC   | International Agency for Research on Cancer                           | RCRA | Resource Conservation and Recovery Act        |
| N/A    | Not Available   | SARA | Superfund Amendments and Reauthorization Act  |
|        |   | TLV  | Threshold Limit Value                         |
|        |   | TSCA | Toxic Substances Control Act                  |
|        |   | IDLH | Immediately dangerous to life and health      |