

# Safety Data Sheet

## Tin (IV) Chloride, Pentahydrate

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

### Section 1 Product Description

**Product Name:** Tin (IV) Chloride, Pentahydrate  
**Recommended Use:** Science education applications  
**Synonyms:** Tin Tetrachloride Pentahydrate, Stannic Chloride Pentahydrate, Tin (IV) Chloride 5-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**



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

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Tin (IV) Chloride, Pentahydrate	10026-06-9	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: 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:** Tin Compounds, Hydrogen chloride

### Section 6 Spill or Leak Procedures

No special spill clean-up considerations. Collect and discard in regular trash. Do not allow the spilled product to enter public drainage system or open waterways.

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## Section 7 Handling and Storage

**Handling:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep locked up and out of the reach of children. Keep container tightly closed and dry. Avoid release to the environment. Refer to special instructions/safety data sheet. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

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

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

## Section 8 Protection Information

<b>Chemical Name</b>	<b>ACGIH</b>		<b>OSHA PEL</b>	
	<b>(TWA)</b>	<b>(STEL)</b>	<b>(TWA)</b>	<b>(STEL)</b>
Tin (IV) Chloride, Pentahydrate	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>4</sub> * 5H <sub>2</sub> O	<b>Vapor Pressure:</b> Negligible as solid.
<b>Molecular Weight:</b> 350.61	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b>	<b>Vapor Density (Air=1):</b> N/A
<b>Odor:</b> No data available	<b>Specific Gravity:</b> 2.04
<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> No data available	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> No data available	<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.

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

**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

### Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
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Tin (IV) Chloride, Pentahydrate      10026-06-9      Not determined      Not determined      INHALATION  
LC50 Rat 2300  
MG/M3

## Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	10026-06-9	Not listed	Not listed	Not listed

## Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
N/A	10026-06-9	

## Section 13 Disposal Information

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

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** UN2440, Stannic Chloride, pentahydrate, 8, III  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

## Section 15 Regulatory Information

**TSCA Status:** 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.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	10026-06-9	No	No	No	No	No

## Section 16 Additional Information

**Revised:** 09/09/2015      **Replaces:** 09/03/2014      **Printed:** 10-29-2015

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.

## Glossary

# Safety Data Sheet

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