



Safety Data Sheet

Stannous Chloride, Dihydrate, Crystal, ACS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Stannous Chloride, Dihydrate, Crystal, ACS

Synonyms/Generic Names: Tin (II) chloride dihydrate; Stannous dichloride dihydrate

Product Number: CP-A2534D, CP-M2534D

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals
39103 Warren Road
Westland MI, 48185

For More Information Call: 734-729-1805 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Skin sensitizer, Corrosive

Target Organs: Blood, Bone

Signal Word: Danger

Pictograms:



GHS Classification:

Acute toxicity, Oral	Category 4
Skin corrosion	Category 1B
Serious eye damage	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary Statements:

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.

Potential Health Effects

Eyes	Causes eye burns.
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Harmful if absorbed through skin. Causes skin burns.
Ingestion	Harmful if swallowed.

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	0
Reactivity	0
Personal	J

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Stannous Chloride, Dihydrate	>98	10025-69-1	231-868-0	SnCl ₂ •2H ₂ O	225.65 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (tin oxides, hydrogen chloride gas) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Pick up and arrange disposal without creating dust. Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Air and moisture sensitive. Store under inert gas. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Component	Exposure Limits	Basis	Entity
Stannous Chloride, Dihydrate	2 mg/m ³	TLV	ACGIH
	2 mg/m ³	PEL	OSHA
	2 mg/m ³	REL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White solid.
Odor	Odorless.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	38°C (100.4°F)
Initial boiling point and boiling range	652°C (1,206°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable

Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	2.71 (Water = 1)
Solubility (ies)	Soluble in methanol. Soluble in less than its own weight of water. In dilute aqueous solutions it will form insoluble oxychloride. Very soluble in dilute or concentrated hydrochloric acid, alcohol, ethyl acetate, glacial acetic acid, sodium hydroxide solution. Decomposed by hot water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Exposure to moisture may affect product quality. Exposure to air may affect product quality.
Incompatible Materials	Hydrogen peroxide, strong bases, strong oxidizing agents, bromine trifluoride, hydrazine, ethylene oxide, metals, organic nitrates.
Hazardous Decomposition Products	Hydrogen chloride gas, tin oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral - rat - 700 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Causes severe skin irritation or skin burns particularly on contact with moist or wet skin.
Eyes	Causes severe eye irritation or eye burns.
Respiratory	Causes chemical burns or burning irritation to the upper respiratory tract, coughing, wheezing. Irritation may lead to chemical pneumonitis and pulmonary edema.
Ingestion	Causes nausea, abdominal pain(cramping), vomiting, and diarrhea. Can cause burning of the lips, mouth tongue, throat, and stomach, stomach bleeding, reduced blood pressure.

Chronic Toxicity	May cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin.
Teratogenicity	Not Available
Mutagenicity	May affect genetic material.
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	May cause adverse reproductive effects and birth defects.
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate), 8, pg III
TDG	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE DIHYDRATE), 8, pg III
IMDG	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (STANNOUS CHLORIDE DIHYDRATE), 8, pg III
Marine Pollutant	No
IATA/ICAO	UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate), 8, pg III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Stannous chloride dihydrate
SARA 312	Stannous chloride dihydrate
SARA 313	Not Listed
WHMIS Canada	CLASS E classification: Corrosive solid.

16. OTHER INFORMATION

Revision	Date
Revision 1	08/27/2012
Revision 2	08/20/2013
Revision 3	11/09/2021

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