

## SECTION 1: Identification of the substance/mixture

### 1.1. Product identifier

Product form	: Substance
Substance name	: Stannous Chloride Test Solution
Formula	: $\text{SnCl}_2 + \text{HCL} + \text{H}_2\text{O} + \text{SN}$
Molecular weight	: 189.62 g/mol
Product code	: LW-SNCL2-TEST
Synonyms	: Tin(II) Chloride Solution

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Laboratory chemicals, Synthesis of substances
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### 1.3. Emergency telephone number

Emergency number	: 1.800.424.9300 (USA) +1.703.527.3887 (INT)
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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1), H290  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318  
Skin sensitization (Category 1), H317  
Germ cell mutagenicity (Category 2), H341  
Reproductive toxicity (Category 2), H361  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  
Specific target organ toxicity - repeated exposure, Oral (Category 2), Cardio-vascular system, H373  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2. GHS Label elements, including precautionary statements

Pictogram : 

Signal word : Danger

Hazard statement(s)

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H290	: May be corrosive to metals.
H314	: Causes severe skin burns and eye damage.
H317	: May cause an allergic skin reaction.
H335	: May cause respiratory irritation.
H341	: Suspected of causing genetic defects.
H361	: Suspected of damaging fertility or the unborn child.
H373	: May cause damage to organs (Cardio-vascular system) through prolonged or repeated exposure if swallowed.
H410	: Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P201	: Obtain special instructions before use.
P202	: Do not handle until all safety precautions have been read and understood.
P234	: Keep only in original container.
P260	: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264	: Wash skin thoroughly after handling.
P271	: Use only outdoors or in a well-ventilated area.
P272	: Contaminated work clothing should not be allowed out of the workplace.
P273	: Avoid release to the environment.
P280	: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313	: IF exposed or concerned: Get medical advice/ attention.
P333 + P313	: If skin irritation or rash occurs: Get medical advice/ attention.
P363	: Wash contaminated clothing before reuse.
P390	: Absorb spillage to prevent material damage.
P391	: Collect spillage.

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- P403 + P233 : Store in a well-ventilated place. Keep container tightly closed.
- P405 : Store locked up.
- P406 : Store in corrosive resistant stainless steel container with a resistant inner liner.
- P501 : Dispose of contents/ container to an approved waste disposal plant.

### 2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

none

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Hazardous components

Component		Classification	Concentration
Hydrochloric acid			
CAS-No.	7647-01-0	Met. Corr. 1; Skin Corr. 1B;	≥ 10 - < 20 %
EC-No.	231-595-7	Eye Dam. 1; STOT SE 3;	
Index-No.	017-002-01-X	H290, H314, H335	
Registration number	01-2119484862-27-XXXX		
Stannous chloride dihydrate			
CAS-No.	10025-69-1	Acute Tox. 4; Skin Corr. 1B;	≥ 1 - < 5 %
EC-No.	231-868-0	Eye Dam. 1; Skin Sens. 1; Muta. 2; Repr. 2; STOT SE 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H314, H317, H332, H335, H341, H361, H373, H410	

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: Description of first aid measures

### 4.1. Description of first aid measures

- General advice : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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- First-aid measures after skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
- First-aid measures after eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
- First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

No data available

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4. More Information

No data available.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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### 6.4. Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

For precautions see section 2.2.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Metal containers must be lined. Corrodes metal.

Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Hydrochloric acid	7647-01-0	C	2.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Not classifiable as a human carcinogen		
		C	5.000000 ppm 7.000000 mg/m3	USA. NIOSH Recommended Exposure Limits
		Often used in an aqueous solution.		
		C	5.000000 ppm 7.000000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m3 is approximate. Ceiling limit is to be determined from breathing-zone air samples.		

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		C	2 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Not classifiable as a human carcinogen		
		C	5 ppm 7 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		Often used in an aqueous solution.		
		C	5 ppm 7 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m <sup>3</sup> is approximate. Ceiling limit is to be determined from breathing-zone air samples.		
		C	5 ppm 7 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
Stannous chloride dihydrate	10025-69-1	TWA	2 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	2 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		Pneumoconiosis (or Stannosis) varies		
		TWA	2 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		PEL	2 mg/m <sup>3</sup>	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

### 8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3. Personal protective equipment

Eye protection : Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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Skin Protection	: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body protection	: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.  If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Environmental exposure controls	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	: Form: clear, liquid Color: colorless
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits	: No data available
Vapor pressure	: No data available
Vapor density	: No data available

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Relative density	: 1.000 g/cm <sup>3</sup> at 20 °C (68 °F)
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: does not ignite
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

### 9.2. Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Strong bases, Bases, Alkali metals, Strong oxidizing agents, Metals, Amines, permanganates, e.g. potassium permanganate, Ethylene oxide, Fluorine, hexalithium disilicide, organic nitrates, Bromine trifluoride, Hydrogen peroxide, Hydrazine

### 10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Tin/tin oxides

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : No data available

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.



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	Dermal: No data available
	No data available
Skin corrosion/irritation	: Irritating to skin and mucous membranes
Serious eye damage/irritation	: Irritating to eyes. May cause irreversible eye damage.
Respiratory or skin sensitization	: No data available
Germ cell mutagenicity	: No data available

### Carcinogenicity

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen.

IARC:	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	: No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: May cause respiratory irritation.
Aspiration hazard	: No data available
Additional Information	: RTECS: Not available irritant effects, Effects due to ingestion may include:, Severe irritation, Burning pain in mouth, throat and stomach.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	: No data available
<b>12.2. Persistence and degradability</b>	
Biodegradability	: No data available
<b>12.3. Bioaccumulative potential</b>	: No data available
<b>12.4. Mobility in soil</b>	: No data available
<b>12.5. Results of PBT and vPvB assessment</b>	: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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- 12.6. Other adverse effects** : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Product** : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- Contaminated Packaging** : Dispose of as unused product.

### SECTION 14: Transport information

#### DOT (US)

- UN number** : 3264
- Class** : 8
- Packing group** : II
- Proper shipping name** : Corrosive liquid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate, Hydrochloric acid)
- Reportable Quantity (RQ)** : no data available
- Poison Inhalation Hazard** : No

#### IMDG

- UN number** : 3264
- Class** : 8
- Packing group** : II
- EMS-No** : F-A, S-B
- Proper shipping name** : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Stannous chloride dihydrate, Hydrochloric acid)
- Marine pollutant** : yes

#### IATA

- UN number** : 3264
- Class** : 8
- Packing group** : II

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Proper shipping name : Corrosive liquid, acidic, inorganic, n.o.s. (Stannous chloride dihydrate, Hydrochloric acid)

### SECTION 15: Regulatory information

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Hydrochloric acid	CAS-No.	Revision Date
	7647-01-0	1993-04-24

#### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

#### Massachusetts Right To Know Components

Hydrochloric acid	CAS-No.	Revision Date
Stannous chloride dihydrate	7647-01-0	1993-04-24
	10025-69-1	1993-04-24

#### Pennsylvania Right To Know Components

Water	CAS-No.	Revision Date
Hydrochloric acid	7732-18-5	1993-04-24
Stannous chloride dihydrate	7647-01-0	1993-04-24
	10025-69-1	

#### New Jersey Right To Know Components

Water	CAS-No.	Revision Date
Hydrochloric acid	7732-18-5	1993-04-24
Stannous chloride dihydrate	7647-01-0	1993-04-24
	10025-69-1	

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### SECTION 16: Other information

#### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. : Acute toxicity  
Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity

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Eye Dam.	: Serious eye damage
H290	: May be corrosive to metals.
H314	: Causes severe skin burns and eye damage.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H341	: Suspected of causing genetic defects.
H361	: Suspected of damaging fertility or the unborn child.
H373	: May cause damage to organs (/*_ORG_REP_ORAL*/) through prolonged or repeated exposure if swallowed.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
Met. Corr.	: Corrosive to metals
Muta.	: Germ cell mutagenicity
Repr.	: Reproductive toxicity
Skin Corr.	: Skin corrosion
Skin Sens.	: Skin sensitization
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure

### HMIS Rating

Health Hazard	: 3
Chronic Health Hazard	: *
Flammability	: 0
Physical Hazard	: 0

### NFPA Rating

Health hazard	: 3
Fire Hazard	: 0
Reactivity Hazard	: 0

### Further Information

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Loudwolf Holdings Ltd. assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his/her application.