Material Safety Data Sheet
Stannous Chloride Solutions, 10 - 40%

Section 1 - Chemical Product and Company Identification

**MSDS Name:**
Stannous Chloride Solutions, 10 - 40%

**Catalog Numbers:**
LC25180, LC25200

**Synonyms:**
None

**Company Identification:**
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

**Company Phone Number:**
(412) 826-5230

**Emergency Phone Number:**
(800) 424-9300

**CHEMTREC Phone Number:**
(800) 424-9300 or
011-703-527-3887

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10025-69-1</td>
<td>Stannous chloride dihydrate</td>
<td>10 - 40%</td>
</tr>
<tr>
<td>7647-01-0</td>
<td>Hydrochloric acid</td>
<td>8.4 - 36</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**Emergency Overview**

**Appearance:** clear, colorless solution

**Danger!** Corrosive. Causes severe burns by all exposure routes. May be fatal if swallowed.

Vapors harmful.

**Target Organs:** eyes, skin, respiratory tract.

**Potential Health Effects**

**Eye:**
Vapors are irritating to the eye. Liquid contact causes severe burns and may result in clouding of the cornea, erosion, up to total corneal opacification and loss of the eye.

**Skin:**
May cause severe burns and ulceration. Skin may turn brown-yellow. Deep burns are slow to heal and scarring may occur. May cause irritation and defatting.
Ingestion:
Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. Headache, nausea, diarrhea, fever; large doses cause hemolysis hemoglobinuria, hyperglycemia, glycosuria, renal failure, convulsions, narcosis, and paralysis. Ingestion causes necrosis of liver and spleen, nausea, abdominal and chest pain, vomiting, diarrhea.

Inhalation:
May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Palpitation, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema may result from inhalation exposure. May cause irritation and dehydration of mucous membranes.

Chronic:
Chronic exposure may result in dental erosion, jaw necrosis, respiratory disease, dermatitis, conjunctivitis, corneal scarring and fever. Dermatitis, conjunctivitis and lacrimation of the eye can occur.

Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until chemical is gone. Get medical aid at once. SPEEDY ACTION IS CRITICAL!

Skin:
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once. SPEEDY ACTION IS CRITICAL!

Ingestion:
Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:
Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Get medical aid at once.

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. Contact with metals may liberate highly flammable hydrogen gas. Highly toxic gases may be liberated by thermal decomposition or combustion.

Extinguishing Media:
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:
No information found.

Flash Point:
No information found.
Material Safety Data Sheet
Stannous Chloride Solutions, 10 - 40%

**NFPA Rating:**
CAS# 10025-69-1: Health- 3, Flammability- 0, Instability- 0.
CAS# 7647-01-0: Health- 3, Flammability- 0, Instability- 1.
CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

**Explosion Limits:**
Lower: n/a  Upper: n/a

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### Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Large spills may be carefully neutralized with dilute alkaline solutions of soda ash, or lime. Clean up spills immediately, observing precautions in the Protective Equipment section.

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### Section 7 - Handling and Storage

**Handling:**
Wash thoroughly after handling. Wash hands before eating. Use only in a well ventilated area. Avoid breathing dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Do not allow contact with water. Use caution when opening.

**Storage:**
Store in a cool, dry area. Store in a tightly closed container. Store capped at room temperature. Protect from heat and incompatibles.

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### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**
Facilities using or storing this material should be equipped with an eyewash and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stannous chloride dihydrate</td>
<td>None of the components are on this list</td>
<td>None of the components are on this list</td>
<td>None of the components are on this list</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>None of the components are on this list</td>
<td>C 5 ppm; C 7 mg/m3</td>
<td>None of the components are on this list</td>
</tr>
<tr>
<td>Water</td>
<td>None of the components are on this list</td>
<td>None of the components are on this list</td>
<td>None of the components are on this list</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:**
None

**Personal Protective Equipment**
Material Safety Data Sheet
Stannous Chloride Solutions, 10 - 40%

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals. Wear splash-proof safety goggles.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH</td>
<td>Strongly acidic</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information found.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information found.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information found.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information found.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No information found.</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>No information found.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information found.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.0 – 1.1</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>No information found.</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information found.</td>
</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
High temperatures, incompatible materials, strong oxidants.

Incompatibilities with Other Materials:
Organic acids, alcohols and glycols, aldehydes, amides, aliphatic and aromatic amines, azo, diazo, and hydrazines, carbamates, caustics, cyanides, dithiocarbamates, esters, ethers, inorganic fluorides, aromatic hydrocarbons, halo.

Hazardous Decomposition Products:
Hydrogen chloride, chlorine, hydrogen gas, acrolein.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information
RTECS:
CAS# 10025-69-1: XP8850000.
CAS# 7647-01-0: MW4025000.
CAS# 7732-18-5: ZC01100000.

LD50/LC50:
CAS# 10025-69-1: No information found.
CAS# 7647-01-0:
   Inhalation, mouse: LC50 = 1108 ppm/1H
   Inhalation, rat: LC50 = 3124 ppm/1H
   Oral, rabbit: LD50 = 900 mg/kg.
CAS# 7732-18-5:
   Oral, rat: LD50 = >90mg/kg

Carcinogenicity:
CAS# 10025-69-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7647-01-0: IARC: Group 3
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:
No information found

Teratogenicity:
Embryo or Fetus: Stunted fetus, ihl-rat TCL0=450 mg/m3/1H Specific Developmental Abnormalities: homeostatis, ihl-rat TCL0=450 mg/m3/1H

Reproductive:
No information found

Mutagenicity:
Sln-dmg-ihl: 100 ppm/24H sln-dmg-orl: 100 ppm cyt-grh-par:20 mg cyt-ham lung: 30 mmol/l cyt-ovr-ham: 8 mmol/l

Neurotoxicity:
No information found

Section 12 - Ecological Information

Ecotoxicity:
Trout LC100=10 mg/l/24H Shrimp LC50=100-330 ppm Starfish LC50=100-330 mg/l/48H Shore crab LC50=240 mg/l/48H Chronic plant toxicity=100 ppm Fish-toxicity LC50:862 mg/l

Environmental:
Substance will neutralize soil carbonate-based components.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information
Section 15 - Regulatory Information

US Federal

TSCA:
CAS# 10025-69-1 is not on the TSCA Inventory, however, its anhydrous form is on the inventory and so this hydrate is exempt from TSCA Inventory requirements (40CFR270.3(u)(2)).
CAS# 7647-01-0 is listed on the TSCA Inventory.
CAS# 7732-18-5 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):
CAS# 7647-01-0: final RQ = 5000 pounds (2270 kg)

CERCLA/SARA Section 313:
This material contains Hydrogen chloride (CAS# 7647-01-0, 8.4 - 36%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:
CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know:
Hydrochloric acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:
None.

European/International Regulations

Canadian DSL/NDSL:
CAS# 10025-69-1 is not listed on Canada's DSL or NDSL Lists.
CAS# 7647-01-0 is listed on Canada's DSL List.
CAS# 7732-18-5 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:
CAS# 10025-69-1 is listed on Canada's Ingredient Disclosure List.
CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 29, 1998
Revision Date: December 24, 2009

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