Material Safety Data Sheet
Stannous chloride, dihydrate

Section 1 - Chemical Product and Company Identification

MSDS Name:
Stannous chloride, dihydrate
Catalog Numbers:
LC25170
Synonyms:
Tin (II) chloride dihydrate
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

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>Tin (II) Chloride Dihydrate</td>
<td>&gt;98</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Colorless to white solid.
Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye:
Causes eye burns.
Skin:
Causes skin burns. Causes redness and pain. May be harmful if absorbed through the skin.
Ingestion:
Harmful if swallowed. Causes gastrointestinal tract burns. Exposure may cause anemia and other blood abnormalities. May cause headache, nausea, fatigue, and dizziness. Inorganic tin salts may cause systemic effects on the central nervous system, heart and liver.
Inhalation:  
Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract. May cause effects similar to those described for ingestion. May be harmful if inhaled.

Chronic:  
Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. Adverse reproductive effects have been reported in animals. Chronic exposure may cause effects similar to those of acute exposure.

Section 4 - First Aid Measures

Eyes:  
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed.

Skin:  
Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:  
Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:  
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:  
Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature:  
Not applicable.

Flash Point:  
Not applicable.

NFPA Rating:  
CAS# 10025-69-1: Health: 3; Flammability: 0; Instability: 1

Explosion Limits:  
Lower: n/a Upper: n/a
Section 6 - Accidental Release Measures

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

Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

Storage:
Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

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>2 mg/m3 TWA (except tin hydride, as Sn) (listed under Tin inorganic compounds).</td>
<td>2 mg/m3 TWA (as Sn, except Tin oxide) (listed under Tin inorganic compounds).</td>
<td>2 mg/m3 TWA (as Sn) (listed under Tin inorganic compounds).</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to minimize contact with skin.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
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Stannous chloride, dihydrate

Section 9 - Physical and Chemical Properties

- Physical State: Solid
- Color: Colorless to white
- Odor: Odorless
- pH: Not available.
- Vapor Pressure: Negligible
- Vapor Density: Not applicable
- Evaporation Rate: Negligible
- Viscosity: Not applicable
- Boiling Point: Decomposes
- Freezing/Melting Point: 100°F
- Decomposition Temperature: Not available
- Solubility in water: Decomposes in water
- Specific Gravity/Density: 2.7
- Molecular Formula: SnCl2.2H2O
- Molecular Weight: 225.62

Section 10 - Stability and Reactivity

- Chemical Stability: Stable under normal temperatures and pressures. May decompose on exposure to moist air or water. Moisture sensitive.
- Conditions to Avoid: Moisture, heating to decomposition.
- Incompatibilities with Other Materials: Metals, strong oxidizing agents, strong reducing agents, strong acids, strong bases, bromine trifluoride, ethylene oxide, potassium, hydrogen peroxide, sodium, moisture, calcium carbide, hydrazine hydrate, organic nitrate.
- Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

- RTECS: CAS# 10025-69-1: XP8850000
- LD50/LC50: CAS# 10025-69-1:
  Oral, rat: LD50 = 2274.6 mg/Kg;
  Oral, rat: LD50 = 700 mg/Kg
- Carcinogenicity: CAS# 10025-69-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
- Epidemiology: No information found
Teratogenicity:
Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Effects on Embryo or Fetus - fetal death.; Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Specific Developmental Abnormalities - craniofacial (including nose and tongue).

Reproductive:
Oral, rat: TDLo = 3 gm/kg (female 7-12 day(s) after conception) Maternal Effects - other effects and Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants). Reproductive - Effects on Embryo or Fetus - fetal death.

Mutagenicity:
DNA Damage: Human, Leukocyte = 10 umol/L.; DNA Damage: Hamster, Ovary = 50 umol/L.

Neurotoxicity:
No information found.

Section 12 - Ecological Information
No information found.

Section 13 - Disposal Considerations
Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Corrosive solid, acidic, inorganic, nos.
Hazard Class: 8
UN Number: UN3260
Packing Group: PGIII

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 10025-69-1 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

SARA Reportable Quantities (RQ):
CAS# 10025-69-1 does not have an RQ.

CERCLA/SARA Section 313:
Not reportable under Section 313.

OSHA - Highly Hazardous:
Not considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 10025-69-1 can be found on the following state right to know lists: Minnesota, (listed as Tin inorganic compounds).

**California Regulations:**
Not listed.

**European/International Regulations**

**Canadian DSL/NDSL:**
CAS# 10025-69-1 is not listed on the DSL or NDSL list.

**Canada Ingredient Disclosure List:**
CAS# 10025-69-1 is listed on the Canadian Ingredient Disclosure List.

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**Section 16 - Other Information**

MSDS Creation Date: September 28, 2006
Revision Date: April 15, 2008

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