Material Safety Data Sheet
Tin(IV) chloride, anhydrous

MSDS# 21790

Section 1 - Chemical Product and Company Identification

MSDS Name: Tin(IV) chloride, anhydrous
Catalog Numbers: AC197510000, AC197510010, AC197510100, AC197511000, AC197512500, AC203380000, AC203380000, AC203380500, T140-500
Synonyms: Stannic chloride.

Company Identification:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

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CAS#: 7646-78-8
Chemical Name: Tin(IV) chloride, anhydrous
%: 99
EINECS#: 231-588-9
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Hazard Symbols: C
Risk Phrases: 34 52/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! Causes burns by all exposure routes. Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment. Target Organs: Respiratory system, gastrointestinal system, eyes, nervous system, skin.

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns. May be harmful if absorbed through the skin.
Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed.
Inhalation: Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract. May be harmful if inhaled.
Chronic: Result in stannosis (benign pneumoconiosis). Laboratory experiments have resulted in mutagenic effects.
Prolonged exposure may cause non-specific nervous system effects.

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 immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is...
Inhalation: difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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. Substance is noncombustible.

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

Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
NFPA Rating: health: 3; flammability: 0; instability: 1;

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin(IV) chloride, anhydrous</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).100 mg/m3 IDLH (as Sn, except Tin oxides) (listed under Tin inorganic compounds).</td>
<td>2 mg/m3 TWA (as Sn, except oxides) (listed under Tin inorganic compounds).</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Tin(IV) chloride, anhydrous: 2 mg/m3 TWA (as Sn, except oxides) (listed under Tin inorganic compounds)

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

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 prevent skin exposure.
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.

Section 9 - Physical and Chemical Properties

- Physical State: Liquid
- Color: fuming - colorless - pale yellow
- Odor: acrid odor
- pH: Not available
- Vapor Pressure: 24.7 mbar @ 20 deg C
- Vapor Density: 9.0
- Evaporation Rate: Not available
- Viscosity: Not available
- Boiling Point: 114 deg C @ 760 mmHg (237.20°F)
- Freezing/Melting Point: -33 deg C (-27.40°F)
- Decomposition Temperature: Not available
- Solubility in water: Reacts
- Specific Gravity/Density: 2.220
- Molecular Formula: Cl4Sn
- Molecular Weight: 260.50

Section 10 - Stability and Reactivity

- Chemical Stability: Moisture sensitive.
- Conditions to Avoid: Incompatible materials, dust generation, excess heat, exposure to moist air or water.
- Incompatibilities with Other Materials: Metals, strong oxidizing agents, acids, strong bases, alcohols, ethylene oxide, potassium, sodium, alkyl nitrates, turpentine.
- Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

- RTECS#: CAS# 7646-78-8: XP8750000
- LD50/LC50: CAS# 7646-78-8: Inhalation, rat: LC50 = 2300 mg/m3/10M;

- Carcinogenicity: Tin(IV) chloride, anhydrous - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
- Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

- Other: Do not empty into drains.

Section 13 - Disposal Considerations

- Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
- Shipping Name: STANNIC CHLORIDE, ANHYDROUS
- Hazard Class: 8
- UN Number: UN1827
- Packing Group: II

Canada TDG
- Shipping Name: STANNIC CHLORIDE ANHYDROUS
- Hazard Class: 8
- UN Number: UN1827
- Packing Group: II

Section 15 - Regulatory Information
European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C
Risk Phrases:
  R 34 Causes burns.
  R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
  S 7/8 Keep container tightly closed and dry.
  S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
  S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 7646-78-8: 1

Canada

CAS# 7646-78-8 is listed on Canada's DSL List
Canadian WHMIS Classifications: E
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 7646-78-8 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7646-78-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 3/02/1998
Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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