## SECTION 1  PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th>PRODUCT NAME:</th>
<th>Thallium (III) Acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT NUMBER:</td>
<td>3526</td>
</tr>
<tr>
<td>CAS NUMBER:</td>
<td>2570-63-0</td>
</tr>
<tr>
<td>SYNONYMS:</td>
<td>Thallium acetate</td>
</tr>
<tr>
<td>MANUFACTURER:</td>
<td>Prochem, Inc.</td>
</tr>
</tbody>
</table>

| PHONE: | 815-398-1788 |
| FAX: | 815-398-1810 |
| TOLL FREE: | 800-795-8788 |

**IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC:** 1-800-424-9300

## SECTION 2  HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

**Pictogram**

![Pictogram](image)

**Signal Word**

Danger

**Hazard Statements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>H300+H330</td>
<td>Fatal if swallowed or if inhaled.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

**Precautionary Phrases**

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P260</td>
<td>Do not breathe dust or mist.</td>
</tr>
<tr>
<td>P264</td>
<td>Wash skin thoroughly after handling.</td>
</tr>
<tr>
<td>P270</td>
<td>Do not eat, drink, or smoke when using this product.</td>
</tr>
<tr>
<td>P271</td>
<td>Use only outdoors or in a well-ventilated area.</td>
</tr>
<tr>
<td>P273</td>
<td>Avoid release into the environment.</td>
</tr>
<tr>
<td>P284</td>
<td>Wear respiratory protection.</td>
</tr>
<tr>
<td>P301+P310</td>
<td>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</td>
</tr>
<tr>
<td>P304+P340</td>
<td>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</td>
</tr>
<tr>
<td>P310</td>
<td>Immediately call a POISON CENTER or doctor/physician.</td>
</tr>
<tr>
<td>P403+P233</td>
<td>Store in a well-ventilated place.</td>
</tr>
<tr>
<td>P405</td>
<td>Store locked up.</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container to an approved waste disposal plant.</td>
</tr>
</tbody>
</table>

**HMIS CLASSIFICATION:**

Health: 3  Fire: 0  Reactivity Hazard: 1
NFPA RATING:
Health: 3  Flammability: 0  Reactivity Hazard: 1

SECTION 2  HAZARDS IDENTIFICATION (Cont.)

EYE CONTACT: Causes irritation of the eyes.
SKIN CONTACT: Causes irritation to skin.
INHALATION: Highly toxic by inhalation. Causes irritation to respiratory system.
INGESTION: May be fatal if swallowed. Highly toxic.

SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Ti(OOCH₃)₃
Molecular Weight: 381.52

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thallium (III) Acetate</td>
<td>2570-63-0</td>
<td>100</td>
</tr>
</tbody>
</table>

SECTION 4  FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water. Assure rinsing under the eyelids. Consult a physician immediately.
SKIN EXPOSURE: Wash affected area with soap and water. Rinse skin thoroughly. Remove contaminated clothes if necessary. Seek immediate medical advice.
INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Immediately consult a physician.

SECTION 5  FIREFIGHTING MEASURES

FLASH POINT: Not available
AUTO IGNITION TEMPERATURE: Not available
EXPLOSION LIMITS: Not available
EXTINGUISHING MEDIUM: Carbon dioxide, extinguishing powder, or water spray. Fight large fires with water spray of alcohol resistant foam.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: thallium oxides and carbon oxides

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation.
ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing it to be released into the environment.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Isolate spillage. Evacuate unprotected persons. Absorb spill with inert materials, then place in well-marked applicable chemical waste container. Dispose of in accordance with all waste regulations.

SECTION 7  HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols.
CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Keep container tightly closed. Store away from oxidizing materials and strong acids. Highly toxic. May decompose on exposure to light.
SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limits</th>
<th>Basis</th>
<th>Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thallium (III) Acetate</td>
<td>0.02 mg/m³</td>
<td>TLV</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/m³</td>
<td>PEL</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/m³</td>
<td>REL</td>
<td>NIOSH</td>
</tr>
</tbody>
</table>

TLV: Threshold Limit Value over 8 hours of work.  REL: Recommended Exposure Limit  PEL: Permissible Exposure Limit

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.
SKIN PROTECTION: Wear nitrile or rubber gloves, apron, or lab coat.
VENTILATION: Provide local exhaust, preferably mechanical.
RESPIRATOR: Use an approved respirator.
ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Fine white crystals.
ODOR: Slight acetic acid smell
MOLECULAR WEIGHT: 381.52
BOILING POINT: 430°C
MELTING POINT: 182°C
SPECIFIC GRAVITY: Not available
VAPOR DENSITY: No data available
SOLUBILITY: Soluble

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Moisture and exposure to light.
INCOMPATIBILITY: Strong oxidizing agents and strong acids.
DECOMPOSITION PRODUCTS: Carbon oxides and thallium oxides.

SECTION 11  TOXICOLOGICAL DATA

ACUTE TOXICITY: Not available
CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.
MUTAGENIC EFFECTS: Not available
TETRATOCENIC EFFECTS: Not available
CHRONIC TOXICITY: Thallium exposure may lead to alopecia. Cutaneous effects may include dry scaly skin and impairment of nail growth resulting in the appearance of crescent-shaped strips across fingernails and toenails (Mees’ line). Acute poisoning results in swelling of the feet and legs, arthralgia, vomiting, insomnia, hyperesthesia and paresthesia of the hands and feet, mental confusion, polyneuritis with severe pain in the legs and loins, partial paralysis of the legs, angina-like pains, nephritis, wasting and weakness, and lymphocytosis and eosinophilia. In chronic poisoning, central and peripheral nervous system abnormalities may persist including ataxia, tremor, incoordination, paralysis of extremities, endocrine disorders, memory loss, and psychoses may develop. Prolonged exposure to iodide may product iodism in sensitive individuals. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers which are usually short in duration.

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.
SECTION 12 ECOLOGICAL DATA

Toxic for aquatic organisms. Do not allow product to reach ground water, watercourse, or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Poisonous for fish and plankton in water bodies. May cause long-lasting harmful effects to aquatic life.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

DOT: UN1707
Thallium compounds, n.o.s.
(Thallium (II) acetate)
CLASS 6.1
PG II

IATA: UN1707
Thallium compounds, n.o.s.
(Thallium (II) acetate)
CLASS 6.1
PG II

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory
DSCL (EEC): Listed on the DSCL inventory
SARA 302/304: Not Listed
SARA 311/312: Acute Health Hazard
SARA (TITLE 313): Thallium (III) Acetate
CALIFORNIA PROP. 65: Not Listed
WHMIS CANADA: Not Listed

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.
DATE PREPARED: 09/14