IDENTIFICATION

MSDS Record Number: 5617461
Product Name(s): ANTIMONY TRICHLORIDE
Product Identification: MSDS NUMBER: A7224
                      PRODUCT CODE: 0878, 3624
                      C.A.S. NUMBER: 10025-91-9
Date of MSDS: 2005-11-10
Currency Note: This MSDS was acquired from the supplier on 2007-09-06.

MANUFACTURER/SUPPLIER INFORMATION

Company: MALLINCKRODT BAKER INC

MATERIAL SAFETY DATA

Effective Date: 11/10/05
Supercedes: 02/18/03

MSDS MATERIAL SAFETY DATA SHEET
CHEMTREC: 800-424-9300 (USA)
703-527-3887 (Outside USA & CANADA)
CANUTEC: 613-996-6666

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Emergency Telephone Number: 908-859-2151
NOTE: Use CHEMTREC and CANUTEC phone numbers only in the event of a chemical emergency.

All non-emergency questions should be directed to Customer Service
(1-800-582-2537) for assistance.

M A L L I N C K R O D T
J. T. B A K E R

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ANTIMONY TRICHLORIDE

1. Product Identification
   Synonyms: Antimony (III) chloride, trichrostitine; antimony butter
   CAS No: 10025-91-9
   Molecular Weight: 228.11
   Chemical Formula: SbCl3
   Product Codes: J.T. Baker:
                  0878
                  Mallinckrodt:

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony Trichloride</td>
<td>10025-91-9</td>
<td>99 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

DANGER! CORROSIVE. CAUSES SEVERE BURNS TO EVERY AREA OF CONTACT. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. AFFECTS THE CARDIOVASCULAR SYSTEM.

J.T. Baker SAF-T-DATA(tm) Ratings (Provided here for your convenience)

<table>
<thead>
<tr>
<th>Health Rating</th>
<th>Flammability Rating</th>
<th>Reactivity Rating</th>
<th>Contact Rating</th>
<th>Lab Protective Equip</th>
<th>Storage Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - Severe (Poison)</td>
<td>0 - None</td>
<td>2 - Moderate</td>
<td>3 - Severe (Corrosive)</td>
<td>GOGGLES; LAB COAT; PROPER GLOVES</td>
<td>White (Corrosive)</td>
</tr>
</tbody>
</table>

Potential Health Effects

Inhalation:
Corrosive. Inhalation of fumes can irritate the mucous membranes and respiratory tract. Symptoms include sore throat, coughing, and shortness of breath, and labored breathing.

Ingestion:
Corrosive. May cause nausea, vomiting, abdominal pain, and diarrhea. Probable lethal dose 50-500 mg/kg.

Skin Contact:
Corrosive. May cause severe burns.

Eye Contact:
Corrosive. Symptoms may include redness, pain, blurred vision, and eye damage.

Chronic Exposure:
Exposure can cause headaches, poor appetite, dry throat, lack of sleep. Antimony compounds affect liver and heart.

Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or eye problems, or impaired liver or respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion:
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes,
lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures
Fire:
Not considered to be a fire hazard.
Explosion:
Not considered to be an explosion hazard.
Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire. Do not use water.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures
Ventilate area of leak or spill. Clean-up personnel require protective clothing and respiratory protection from toxic fumes.
Spills: pick up and place in a suitable container for reclamation or disposal in a method that does not generate dust. Do not use water except for very small quantities (Reactive).
US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage
Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection
Airborne Exposure Limits:
Antimony:
-OSHA Permissible Exposure Limit (PEL):
  0.5 mg (Sb)/m³ (TWA)
-ACGIH Threshold Limit Value (TLV):
  0.5 mg(Sb)/m³ (TWA)
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, a full facepiece particulate respirator (NIOSH type N100 filters) may be worn for up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Transparent, colorless crystals.
Odor: Pungent odor.
Solubility: Soluble in water with release of heat and toxic fumes.
Density: 3.14
pH: No information found.
% Volatiles by volume @ 21°C (70°F): 0

Boiling Point: 223°C (433°F)
Melting Point: 73°C (163°F)
Vapor Density (Air=1): 7.9
Vapor Pressure (mm Hg): 1.0 @ 49°C (120°F)
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage. Reacts vigorously with moisture, generating heat and hydrogen chloride gas.

Hazardous Decomposition Products:
Toxic metal fumes may form when heated to decomposition.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Reacts with moisture to form hydrochloric acid and toxic precipitates.
Reacts violently with bases ammonia, aluminum, potassium, and sodium. On contact with air, it evolves hydrogen chloride.

Conditions to Avoid:
No information found.

11. Toxicological Information

Oral rat LD50: 525 mg/kg. Investigated as a mutagen, reproductive effector.

Ingredient Antimony Trichloride (10025-91-9)  
---NTP Carcinogen--- Known Anticipated IARC Category

Antimony Trichloride (10025-91-9) No No None

12. Ecological Information

Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal
regulations may differ from federal disposal regulations. 
Dispose of container and unused contents in accordance with federal, 
state and local requirements.

14. Transport Information
Domestic (Land, D.O.T.)
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Proper Shipping Name: ANTIMONY TRICHLORIDE, SOLID
Hazard Class: 8
UN/NA: UN1733 Packing Group: II
Information reported for product/size: 2.5KG
International (I.M.O.)
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Proper Shipping Name: ANTIMONY TRICHLORIDE, SOLID
Hazard Class: 8
UN/NA: UN1733 Packing Group: II
Information reported for product/size: 2.5KG

15. Regulatory Information
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<th>TSCA</th>
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<tr>
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<th>Korea</th>
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<th>Chemical Catg.</th>
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<td>No</td>
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<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
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<td></td>
<td></td>
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</table>

Chemical Weapons Convention: No TSCA 12(b): No CDFA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure / Solid)

Australian Hazchem Code: 4WE
Australian Poison Schedule: S6

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information
NFPA Ratings:
Health: 3 Flammability: 0 Reactivity: 1
Label Hazard Warning:
DANGER! CORROSIVE. CAUSES SEVERE BURNS TO EVERY AREA OF CONTACT. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. AFFECTS THE CARDIOVASCULAR SYSTEM.
Label Precautions:
Do not get in eyes, on skin, or on clothing.
Do not breathe dust.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:
In all cases call a physician immediately. If swallowed, give several
glasses of water or milk to drink. Vomiting may occur spontaneously, but
DO NOT INDUCE! Never give anything by mouth to an unconscious person. If
inhaled, remove to fresh air. If not breathing, give artificial
respiration. If breathing is difficult, give oxygen. In case of contact,
immediately flush eyes or skin with plenty of water for at least 15
minutes while removing contaminated clothing and shoes. Wash clothing
before reuse.

Product Use:
Laboratory Reagent.

Revision Information:
No Changes.

Disclaimer:
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A7224

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