Section 1 - Product and Company Information

Product Name: SODIUM TRICHLOROACETATE, 97%
Product Number: 190780
Brand: ALDRICH
Company: Sigma-Aldrich Canada, Ltd
Address: 2149 Winston Park Drive
          Oakville ON L6H 6J8 CA
Technical Phone: 9058299500
Fax: 9058299292
Emergency Phone: 800-424-9300

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM TRICHLOROACETATE</td>
<td>650-51-1</td>
<td>No</td>
</tr>
</tbody>
</table>

Formula: C2Cl3O2.Na
Synonyms:
- ACP grass killer
- Allied Arcadian Sodium TCA
- Antiperz
- Antyperz
- Dow sodium TCA inhibited
- Green cross couch grass killer
- Natriumtrichlooracetaat (Dutch)
- Natriumtrichloracetat (German)
- Sodio(trichloroacetato di) (Italian)
- Sodium TCA inhibited
- Sodium (trichloracetate de) (French)
- Sodium trichloroacetate
- STCA
- TCA sodium
- Trichloressigsaures natrium (German)
- Trichloroacetic acid sodium salt
- Trichloroctan sodny (Czech)
- Varitox
- Weedmaster grass killer

RTECS Number: AJ9100000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Irritant.
Irritating to eyes, respiratory system and skin.

HMIS RATING
- HEALTH: 2
- FLAMMABILITY: 0
- REACTIVITY: 0

NFPA RATING
- HEALTH: 2
- FLAMMABILITY: 0
- REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures
ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE
In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)
Material: Irritant.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
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<tr>
<td>Appearance</td>
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<td>Molecular Weight</td>
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<td>pH</td>
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<td>BP/BP Range</td>
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<tr>
<td>MP/MP Range</td>
<td>&gt; 290 °C</td>
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<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<td>Saturated Vapor Conc.</td>
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<td>Odor Threshold</td>
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<td>Solubility</td>
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</table>

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION
## ROUTE OF EXPOSURE
Inhalation: Material is irritating to mucous membranes and upper respiratory tract.  
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

## SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### TOXICITY DATA

<table>
<thead>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>LD50</td>
</tr>
</tbody>
</table>
Oral  
Chicken  
4280 mg/kg  
LD50

CHRONIC EXPOSURE - CARCINOGEN

Species: Mouse  
Route of Application: Oral  
Dose: 158 GM/KG  
Exposure Time: 1Y  
Frequency: C  
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

CHRONIC EXPOSURE - MUTAGEN

Species: Human  
Dose: 100 MG/L  
Cell Type: lymphocyte  
Mutation test: Cytogenetic analysis

Species: Mouse  
Dose: 2400 MG/L  
Cell Type: lymphocyte  
Mutation test: Mutation in mammalian somatic cells.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION  
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT  
Proper Shipping Name: None  
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA  
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s  
IATA UN Number: 3077  
Hazard Class: 9  
Packing Group: III

Section 15 - Regulatory Information

EU DIRECTIVES CLASSIFICATION  
Symbol of Danger: Xi  
Indication of Danger: Irritant.  
R: 37-50/53  
Risk Statements: Irritating to respiratory system. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S: 46-60-61  
Safety Statements: If swallowed, seek medical advice immediately
and show this container or label. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Irritant.
Risk Statements: Irritating to eyes, respiratory system and skin.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No
TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: No
NDSL: Yes

Section 16 - Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.