Section 1 - Product and Company Information

Product Name: Sodium dichloracetate, 98%
Product Number: 347795
Brand: Aldrich Chemical
Company: Sigma-Aldrich
Address: 3080 Spouse Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Emergency Phone: 314-776-5555

Section 2 - Composition/Information on Ingredient

Substance Name: Sodium Dichloracetate
CAS #: 2156-56-1
SARA 313: No
FC no: 218-461-3

Formula: C2D4Cl2Na
Synonyms: Dichloroacetate, sodium salt, Dichloroacetic acid sodium salt, Dichloroacetate (C2aCl)2, Sodium dichloracetate

Section 3 - Hazards Identification

Emergency Overview:
Irritant. Inhaling to eyes, respiratory system and skin.

HNCS 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

Autoignition Temp: N/A
Extinguishing Media:
Water spray. 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.

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.

Section 8 - Exposure Controls / PPE

Engineering Controls:
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment:
Respiratory:
Use respirator 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.

Section 9 - Physical/Chemical Properties

Appearance:
Physical State:
Solid

Sigma-Aldrich Chemical - 347795
Page 2
Molecular Weight: 150.93 AMU

pH: N/A
BP/BP Range: N/A
M/P/M Range: N/A
Freezing Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Saturated Vapor Conc.: N/A
SG/Density: N/A
Bulk Density: N/A
Odor Threshold: N/A
Volatile: N/A
VOC Content: N/A
Water Content: N/A
Solvent Content: N/A
Evaporation Rate: N/A
Viscosity: N/A
Partition Coefficient: N/A
Decomposition Temp.: N/A
Flash Point °F: N/A
Flash Point °C: N/A
Explosion Limits: N/A
Flammability: N/A
Autoignition Temp: N/A
Solubility: N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable.

Conditions to Avoid
Moisture

Materials to Avoid
Strong oxidizing agents

Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide, Hydrogen chloride gas

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
Causes skin irritation.

Skin Absorption
May be harmful if absorbed through the skin.

Eye Contact
Causes eye irritation.

Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Section 12 - Ecological Information

No data available

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.

Discretion or mix the material with a combustible sorbent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport

IATA
Non-Hazardous for Air Transport

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xi

Indication of Danger
Instant.

Risk Statements
R: 36/37/38

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: A59275000

Toxicity Data
Oral: Rat: 5281 mg/kg (LD50)
Oral: Mouse: 4840 mg/kg (LD50)
Intraperitoneal: Mouse: >3 GM/KG (LD50)

Chronic Exposure: Carcinogen
Mouse: Oral: 104 GM/KG 1Y C
Result: Tumorigenic-Equivalent tumorigenic agent by RTECS criteria: Liver Tumors.

Chronic Exposure: Reproductive Hazard

<table>
<thead>
<tr>
<th>Species</th>
<th>Dose</th>
<th>Route of Application</th>
<th>Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>102 GM/KG</td>
<td>Oral</td>
<td>(19W MALE)</td>
</tr>
<tr>
<td></td>
<td>4375 MG/KG</td>
<td>Oral</td>
<td>(10W MALE)</td>
</tr>
<tr>
<td></td>
<td>2188 MG/KG</td>
<td>Oral</td>
<td>(10W MALE)</td>
</tr>
</tbody>
</table>

Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count), Paternal effects: Testes, epididymis, sperm duct.
US Classification and Label Text

Indication of Danger

Instant

Risk Statements

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

United States Regulatory Information

SARA Listed: No

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPbR, and the MSDS contains all the information required by the CPbR.

DSL: No

NDSL: No

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 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.