SAFETY DATA SHEET
Santa Cruz Biotechnology, Inc.
Revision date 11-Jul-2014
Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name
EDTA, Tetrasodium Tetrahydrate Salt
Product Code
SC-204735

Recommended use of the chemical and restrictions on use
For research use only. Not intended for diagnostic or therapeutic use.

Details of the supplier of the safety data sheet
Santa Cruz Biotechnology, Inc.
10410 Finnell Street
Dallas, TX 75220
331.457.3800
800.457.3801
scbt@scbt.com

Emergency telephone number
Chemtrec
800.424.9300 (Within USA)
703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Classification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements
Signal word
Not classified
Hazard statements
Not classified
Symbols/Pictograms

Precautionary Statements - Prevention
Wash hands thoroughly after handling

Precautionary Statements - Response

Hazard not otherwise classified (HNOC)
Hazards not otherwise classified (HNOC)
Not applicable

Other Information
NFPA

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Molecular Weight</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>13235-36-4</td>
<td>452.23</td>
<td>C10H12N2O6•4NA•4H2O</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>weight-%</th>
<th>Oral LD50</th>
<th>dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
</table>
ERROR: ioerror
OFFENDING COMMAND: image

STACK:
- dictionary-
- mark-
- savelevel-
- mark-
- savelevel-
1. Identification of the substance/preparation and of the company/undertaking

Product name: EDTA, Tetrasodium Salt
Synonym: Ethylenediaminetetraacetic Acid, Tetrasodium Salt

Catalog #: 34103
Supplier: EMD Biosciences, Inc.
10394 Pacific Center Court
San Diego, CA 92121
PHONE: (858)450-5558/(800)854-3417
FAX: (858)453-3552

Emergency telephone number:
Call Chemtree®
(800)424-9300 (within U.S.A.)
(703)227-3887 (outside U.S.A.)

2. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Substance/Preparation</th>
<th>Substance</th>
<th>CAS No.</th>
<th>EC Number</th>
<th>Symbol</th>
<th>R-Phrases</th>
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</thead>
<tbody>
<tr>
<td>EDTA, Tetrasodium Salt</td>
<td></td>
<td>04-02-0</td>
<td>200-573-9</td>
<td>Xi</td>
<td>R36/37/38</td>
</tr>
</tbody>
</table>

3. Hazards identification

Physical/chemical hazards: Not applicable.
Human health hazards: CAUTION!
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

4. First-aid measures

First-Aid measures

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

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or wristband.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Effects and symptoms

Inhalation: Hazardous in case of inhalation (lung irritant).
Skin Contact: Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Eye Contact: Hazardous in case of eye contact (irritant).

Aggravating conditions: Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire-fighting measures

Flammability of the Product: May be combustible at high temperature.

Stingishing Media: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Hazardous thermal (de)composition products: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.

Fire-fighting procedures: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters: Be sure to use an approved/certified respirator or equivalent.
5. Accidental release measures

**Personnel precautions**
- Splash goggles.
- Full suit.
- Dust respirator.
- Boots.
- Gloves.
A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Small Spill and Leak**
- Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill and Leak**
- Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and storage

**Handling**
- Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

**Storage**
- Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 20°C (68°F).

**Packaging materials**
- Use original container.

3. Exposure controls/personal protection

**Engineering measures**
- Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Hygiene measures**
- Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

**Ingredient Name**

| Occupational Exposure Limits |

**Personal protective equipment**

- Dust respirator. Be sure to use an approved/certified respirator or equivalent.

**Respiratory system**
- Lab coat.

**Hands**
- Gloves.

**Eyes**
- Splash goggles.

**Protective Clothing (Pictograms)**

8. Physical and chemical properties

**Physical state**
- Solid. (Solid powder.)

**Color**
- White.

**Molecular Weight**
- 380.2 g/mole

**Solubility**
- Easily soluble in cold water.

**Flash point**
- Not available.

**Explosive properties**
- Risks of explosion of the product in presence of mechanical impact: Not available.
- Risks of explosion of the product in presence of static discharge: Not available.

10. Stability and reactivity

**Stability**
- The product is stable.

**Conditions to avoid**
- Not available.

**Materials to avoid**
- Reactive with oxidizing agents, acids.

**Hazardous Decomposition Products**
- These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...). Some metallic oxides.
1. Toxicological information

LECS#  : AHS075000

Skin irritation  : Hazardous in case of skin contact (irritant).

Acute toxicity  : LD50: Not available.
LC50: Not available.

Chronic toxicity  : Repeated or prolonged exposure is not known to aggravate medical condition.

Other Toxic Effects on Humans  : Not available.
Hazardous in case of skin contact (irritant), of inhalation (lung irritant).
Not available.
Material is irritating to mucous membranes and upper respiratory tract.

Specific effects:
Carcinogenic effects  : Classified None. by NIOSH.
Mutagenic effects  : Not available.
Reproductive toxicity  : Not available.
Teratogenic effects  : Not available.

2. Ecological information

Toxicity  : Not available.
Acute toxicity of the Products of degradation  : The product itself and its products of degradation are not toxic.

3. Disposal considerations

Methods of disposal: Waste of residues: Not applicable.
Contaminated packaging  : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

4. Transport information

International transport regulations

ADR/RID Class  : Not controlled under ADR (Europe).
IMDG Class  : Not controlled under IMDG.
IATA-DGR Class  : Not controlled under IATA.
Not applicable.

5. Regulatory information

Regulations

Hazard symbol(s)  : X
Classification  : Irritant
Risk Phrases  : R36/37/38- Irritating to eyes, respiratory system and skin.
Safety Phrases  : S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36- Wear suitable protective clothing.

U.S. Federal Regulations

TSCA 8(b) inventory: EDTA, Tetrasodium Salt
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: EDTA, Tetrasodium Salt
SARA 311/312 MSDS - chemical inventory - hazard identification: EDTA, Tetrasodium Salt; immediate health hazard
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.
6. Other information

<table>
<thead>
<tr>
<th>Hazardous Material Information System (U.S.A.)</th>
<th>National Fire Protection Association (U.S.A.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Fire Hazard</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Reactivity</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>Personal Protection</td>
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</table>

**To Reducer
t the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any responsibility whatsoever for the accuracy or completeness of the information contained herein.

**To Reducer

*The determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. **This product is intended for research only.**