

# 2-Chloro-N,N-diethylethylamine hydrochloride: sc-237987



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 2-Chloro-N,N-diethylethylamine hydrochloride  
**Product Number:** sc-237987  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

Highly toxic by inhalation. Highly toxic by ingestion. Highly toxic by skin absorption. Corrosive

#### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

#### Hazard statement(s)

H300 + H310

Fatal if swallowed or in contact with skin.

H315

Causes skin irritation.

H318

Causes serious eye damage.

H330

Fatal if inhaled.

H335

May cause respiratory irritation.

#### Precautionary statement(s)

P260

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/ eye protection/ face protection.

P284

Wear respiratory protection.

P302 + P350

IF ON SKIN: Gently wash with plenty of soap and water.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/ physician.

#### HMIS Classification

Health hazard: 3

Flammability: 0

Physical hazards: 0

#### NFPA Rating

Health hazard: 4

Fire: 0

Reactivity Hazard: 0

### Potential Health Effects

- Inhalation:** May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
- Skin:** Causes skin burns. May be fatal if absorbed through skin.
- Eyes:** Causes eye burns.
- Ingestion:** May be fatal if swallowed. Causes burns.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms:** 2-Chlorotriethylaminehydrochloride; 2-(Diethylamino)ethyl chloridehydrochloride  
**Formula:** C<sub>6</sub>H<sub>15</sub>Cl<sub>2</sub>N  
**Molecular Weight:** 172.1

<i>CAS-No.</i>	<i>EC-No.</i>	<i>Index-No.</i>	<i>Concentration</i>
2-Chloroethyldiethylammonium chloride 869-24-9	212-786-4	-	-

### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	crystalline	pH	no data available
Boiling point	no data available	Flash point	no data available
Ignition temperature	no data available	Lower explosion limit	no data available
Upper explosion limit	no data available	Water solubility	no data available
Melting point	208 - 210 °C (406 - 410 °F) - lit.		

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Avoid moisture.

### Materials to avoid

Strong oxidizing agents. Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - Carbon oxides, nitrogen oxides (NO<sub>x</sub>), hydrogen chloride gas

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**LD50 Oral - rat** - 50 mg/kg

**Remarks:** Behavioral:Somnolence (general depressed activity).

**LC50 Inhalation - rat** - 4 h - 103 mg/m<sup>3</sup>

**Remarks:** Behavioral:Somnolence (general depressed activity). Behavioral:Tremor. Lungs, Thorax, or

**Respiration:**Dyspnea.

**LD50 Dermal - rabbit** - 125 mg/kg

**Remarks:** Gastrointestinal:Other changes. Prolonged skin contact may cause skin irritation and/or dermatitis.

### Skin corrosion/irritation

**Skin - rabbit** - Severe skin irritation

**Serious eye damage/eye irritation**

**Eyes - rabbit** - Severe eye irritation

**Respiratory or skin sensitization**

no data available

### Germ cell mutagenicity

**Genotoxicity in vitro - rat** - Liver

Unscheduled DNA synthesis

**Genotoxicity in vitro - rat - Other cell types**

Sister chromatid exchange

**Genotoxicity in vitro - mouse - lymphocyte**

Mutation in mammalian somatic cells.

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation:** May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Skin:** Causes skin burns. May be fatal if absorbed through skin.

**Eyes:** Causes eye burns.

**Ingestion:** May be fatal if swallowed. Causes burns.

**Signs and Symptoms of Exposure**

Cough, shortness of breath, headache, nausea, vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: YE1050000

**12. ECOLOGICAL INFORMATION**

**Toxicity**

no data available

**Bioaccumulative potential**

no data available

**PBT and vPvB assessment**

no data available

**Persistence and degradability**

no data available

**Mobility in soil**

no data available

**Other adverse effects**

no data available

**13. DISPOSAL CONSIDERATIONS**

**Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**DOT (US)**

UN-Number: 2811

Class: 6.1

Packing group: II

Proper shipping name: Toxic solids, organic, n.o.s. (2-Chloroethyldiethylammonium chloride)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2811                      Class: 6.1                      Packing group: II                      EMS-No: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (2-Chloroethyldiethylammonium chloride)  
Marine pollutant: No

**IATA**

UN-Number: 2811                      Class: 6.1                      Packing group: II  
Proper shipping name: Toxic solid, organic, n.o.s. (2-Chloroethyldiethylammonium chloride)

**15. REGULATORY INFORMATION****OSHA Hazards**

Highly toxic by inhalation. Highly toxic by ingestion. Highly toxic by skin absorption. Corrosive

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

2-Chloroethyldiethylammonium chloride

CAS-No.: 869-24-9

**New Jersey Right To Know Components**

2-Chloroethyldiethylammonium chloride

CAS-No.: 869-24-9

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION**

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

5/29/2012