

# Nickel(II) chloride ethylene glycol dimethyl ether complex: sc-236168



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Nickel(II) chloride ethylene glycol dimethyl ether complex

**Product Number:** sc-236168

**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

Water Reactive, Target Organ Effect, Toxic by ingestion, Respiratory sensitizer, Irritant, Carcinogen

#### Target Organs

Lungs

#### GHS Classification

Substances, which in contact with water, emit flammable gases (Category 2)

Acute toxicity, Oral (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Respiratory sensitization (Category 1)

Carcinogenicity (Category 1B)

Acute aquatic toxicity (Category 1)

#### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

#### Hazard statement(s)

|      |  |
|------|--|
| H261 | In contact with water releases flammable gases.                            |
| H301 | Toxic if swallowed.  |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H350 | May cause cancer.  |
| H400 | Very toxic to aquatic life.  |

#### Precautionary statement(s)

|                    |  |
|--------------------|--|
| P201               | Obtain special instructions before use.  |
| P231 + P232        | Handle under inert gas. Protect from moisture.   |
| P261               | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.   |
| P273               | Avoid release to the environment.  |
| P301 + P310        | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.   |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313        | IF exposed or concerned: Get medical advice/ attention.  |
| P422               | Store contents under inert gas.  |

**HMIS Classification**

**Health hazard:** 2  
**Chronic Health Hazard:** \*  
**Flammability:** 0  
**Physical hazards:** 1

**NFPA Rating**

**Health hazard:** 2  
**Fire:** 3  
**Reactivity Hazard:** 1  
**Special hazard.:** W

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** Toxic if swallowed.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms:** NiCl<sub>2</sub> glyme

**Formula:** C<sub>4</sub>H<sub>10</sub>O<sub>2</sub> · Cl<sub>2</sub>Ni

**Molecular Weight:** 219.72

| <i>CAS-No.</i>  | <i>EC-No.</i> | <i>Index-No.</i> | <i>Concentration</i> |
|---|---------------|------------------|----------------------|
| <b>Nickel(II) chloride ethylene glycol dimethyl ether complex</b> |               |                  |                      |
| CAS-No. 29046-78-4  | -             | -                | -                    |

**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**

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. FIREFIGHTING MEASURES****Suitable extinguishing media**

Dry powder Carbon dioxide (CO<sub>2</sub>)

**Extinguishing media which shall not be used for safety reasons**

Water

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Nickel/nickel oxides

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. 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. Keep away from sources of ignition - no smoking.

### **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Heat sensitive. Desiccate 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 N100(US) or type P3 (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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin and body protection**

Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **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                                      | solid    | pH                    | N/A |
| Melting point/freezing point              | > 300 °C | Boiling point         | N/A |
| Flash point                               | N/A      | Ignition temperature  | N/A |
| Autoignition temperature                  | N/A      | Lower explosion limit | N/A |
| Upper explosion limit                     | N/A      | Vapor pressure        | N/A |
| Density                                   | N/A      | Water solubility      | N/A |
| Relative vapor density                    | N/A      | Odor                  | N/A |
| Odor Threshold                            | N/A      | Evaporation rate      | N/A |
| Partition coefficient:<br>n-octanol/water | N/A      |                       |     |

## **10. STABILITY AND REACTIVITY**

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of hazardous reactions**

Reacts violently with water.

### **Conditions to avoid**

Exposure to moisture.

**Materials to avoid**

Strong oxidizing agents, Peroxides

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Nickel/nickel oxides

**Other decomposition products**

no data available

**11. TOXICOLOGICAL INFORMATION****Acute toxicity****Oral LD50**

no data available

**Inhalation LC50**

no data available

**Dermal LD50**

no data available

**Other information on acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

May cause allergic respiratory reaction.

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen.

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

**Teratogenicity**

no data available

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

no data available

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

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** Toxic if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Signs and Symptoms of Exposure**

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

**Synergistic effects**

no data available

## **Additional Information**

**RTECS:** Not available

## **12. ECOLOGICAL INFORMATION**

### **Toxicity**

no data available

### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **PBT and vPvB assessment**

no data available

### **Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### **Very toxic to aquatic life.**

no data available

## **13. DISPOSAL CONSIDERATIONS**

### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. 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: 3134

Class: 4.3 (6.1)

Packing group: II

Proper shipping name: Water-reactive solid, toxic, n.o.s. (Nickel(II) chloride ethylene glycol dimethyl ether complex)

Marine pollutant: No

Poison Inhalation Hazard: No

### **IMDG**

UN number: 3134

Class: 4.3 (6.1)

Packing group: II

EMS-No: F-G, S-N

Proper shipping name: WATER-REACTIVE SOLID, TOXIC, N.O.S. (Nickel(II) chloride ethylene glycol dimethyl ether complex)

Marine pollutant: No

### **IATA**

UN number: 3134

Class: 4.3 (6.1)

Packing group: II

Proper shipping name: Water-reactive solid, toxic, n.o.s. (Nickel(II) chloride ethylene glycol dimethyl ether complex)

## **15. REGULATORY INFORMATION**

### **OSHA Hazards**

Water Reactive, Target Organ Effect, Toxic by ingestion, Respiratory sensitiser, Irritant, Carcinogen

### **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**

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

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**New Jersey Right To Know Components**

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**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.*

9/20/2012