# Lithium sulfate monohydrate: sc-211743



# MATERIAL SAFETY DATA SHEET

The Power to Question

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lithium sulfate monohydrate

**Product Number:** sc-211743

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue Santa Cruz, CA 95060 800.457.3801 or 831.457.3800

ChemWatch

**Emergency:** 

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** 

Target Organ Effect, Teratogen

Target Organs

Central nervous system, Kidney, Cardiovascular system. GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel P301 + P312

P330 Rinse mouth.

P501 Dispose of contents/container to an approved waste disposal plant.

**HMIS Classification** 

Health hazard: **Chronic Health Hazard:** Flammability: 0 Physical hazards: 0 NFPA Rating Health hazard: 0

Fire: 0 **Reactivity Hazard:** 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if absorbed through skin. May cause skin irritation. Skin

May cause eye irritation. **Eyes** Ingestion May be harmful if swallowed.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: Li2SO4 · H2O Molecular Weight: 127.96 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Lithium culfata manahuduata			

Lithium sulfate monohydrate

233-820-4 10102-25-7

#### 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. 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. 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** 

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

**Environmental precautions** 

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 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. Hygroscopic.

# 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 dust mask type N95 (US) or type P1 (EN 143) 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

Safety glasses with side-shields conforming to EN166.

Skin and body protection

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

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

crystalline pH at 25 °C at 128.0 g/l Form 5.0 - 7.0Melting point no data available Boiling point no data available Flash point not applicable Ignition temperature no data available Upper explosion limit Lower explosion limit no data available no data available Water solubility at 20 °C Density 2.060 g/cm3 ca.128 g/l

#### 10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

Exposure to moisture may affect product quality.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Lithium oxides

# 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as IARC:

probable, possible or confirmed human carcinogen by IARC.

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

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

Lithium and its compounds are possible teratogens by analogy to lithium carbonate which has equivocal human teratogenic data and positive animal teratogenic data.

Specific target organ toxicity - single exposure (GHS)

no data available

Specific target organ toxicity - repeated exposure (GHS)

no data available

**Aspiration hazard** 

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

May be harmful if absorbed through skin. May cause skin irritation. Skin

Eyes May cause eye irritation.
Signs and Symptoms of Exposure

Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion., Lithium and its compounds are possible teratogens by analogy to lithium carbonate which has equivocal human teratogenic data and positive animal teratogenic data.. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# 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)

Not dangerous goods Not dangerous goods Not dangerous goods

# 15. REGULATORY INFORMATION

OSHA Hazards Target Organ Effect, Teratogen

**DSĽ 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

Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act. **Pennsylvania Right To Know Components** 

Lithium sulfate monohydrate CAS-No. 10102-25-7

**New Jersey Right To Know Components** 

Lithium sulfate monohydrate CAS-No. 10102-25-7

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.

1/17/2012