# LTC4 (Leukotriene C4): sc-201046



# MATERIAL SAFETY DATA SHEET

The Power to Question

# 1. Identification of the substance/mixture and of the company/undertaking

**Product Name:** LTC4 (Leukotriene C4)

Catalog Number: sc-201046

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

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



GHS06

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.



GHS08

STOT SE 1 H370 Causes damage to organs.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:



T+; Very toxic

R28: Very toxic if swallowed.



T; Toxic

R24-39/23: Toxic in contact with skin. Toxic: danger of very serious irreversible effects through inhalation. R10: Flammable.

### Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

# Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### Label elements

### Labeling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



T+ Very toxic

### Hazard - determining components of labeling:

methanol

# Risk phrases:

10 Flammable.

Toxic in contact with skin.Very toxic if swallowed.

39/23 Toxic: danger of very serious irreversible effects through inhalation.

# Safety phrases:

3/7 Keep container tightly closed in a cool place.

Do not breathe fumes.Avoid contact with eyes.Do not empty into drains.

Wear suitable gloves.

62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Other hazards

#### Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

# 3. Composition/information on ingredients

**Synonyms:** N-L-gamma-glutamyl-L-cysteinyl]glycine

CAS Number: 72025-60-6 Molecular Formula: C30H47N3O9S

Molecular Weight: 625.77

**Concentration:** 50  $\mu$ g/ml in methanol/ammonium acetate buffer, 65:35, pH 5.6

**Chemical characterization:** Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:** 

CAS-No.	EC-No.	Index-No.	Concentration
methanol			
67-56-1	200-659-6	603-001-00-X	65%

# Additional information:

For lyophilized materials containing hazardous substances, percent hazardous material determination based on pre-lyophilized volume. For the wording of the listed risk phrases refer to section 16.

# 4. First aid measures

# Description of first aid measures

### General information:

Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration.

### After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

### After skin contact:

Seek medical attention if symptoms appear. Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing.

### After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

# After ingestion:

Do not induce vomiting; call for medical help immediately.

### Information for doctor:

# Most important symptoms and effects, both acute and delayed

No further relevant information available.

# Indication of any immediate medical attention and special treatment needed

No further relevant information available.

# 5. Firefighting measures

### **Extinguishing media**

### Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

### Special hazards arising from the substance or mixture:

No further relevant information available.

### **Advice for firefighters**

### **Protective equipment:**

Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

### 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Wear protective clothing.

# **Environmental precautions:**

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.

### Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

### Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

### 7. Handling and storage

### Handling:

### Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

# Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

# Conditions for safe storage, including any incompatibilities

#### Storage:

### Requirements to be met by storerooms and receptacles:

Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information). Store at -80° C.

### Information about storage in one common storage facility:

Keep away from heat, sources of ignition and incompatibles such as oxidizing agents.

### Further information about storage conditions:

Keep container tightly sealed. Store under lock and key and with access restricted to technical experts or their assistants only.

#### Specific end use(s):

No further relevant information available.

### 8. Exposure controls/personal protection

### Additional information about design of technical facilities:

No further data; see item 7.

### **Control parameters**

# Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### **Additional information:**

The lists valid during the making were used as basis.

### **Exposure controls**

### Personal protective equipment:

### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin.

# Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

#### Protection of hands:



# **Protective gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

# **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye protection:



**Tightly sealed goggles** 

# 9. Physical and chemical properties

Form: Liquid Odor: Characteristic Odor threshold: Not determined. pH-value: Not applicable. Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined. Flash point: Not applicable. Flammability (solid, gaseous): Not applicable. Decomposition temperature: Not determined. Self-igniting: No. Lower/Upper Explosion limits: Not determined. Vapor pressure: Not applicable. Density: Not determined. Relative density Not determined. Vapor density Not applicable. Evaporation rate Not applicable. Dynamic Viscosity: Not applicable. Not applicable. Kinematic Viscosity: Solubility/Miscibility with water: Fully miscible. Segregation coefficient Not determined. Danger of explosion: Not determined. (n-octanol/water):

Organic solvents: 65%

# 10. Stability and reactivity

#### Reactivity

# Chemical stability:

Stable. Avoid strong oxidizing agents.

# Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

# Possibility of hazardous reactions:

No dangerous reactions known.

Conditions to avoid:

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products:

No dangerous decomposition products known.

# 11. Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect: on the skin: Not determined. on the eye: Not determined.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification

Guidelines for Preparations as issued in the latest version: Toxic

# 12. Ecological information

**Toxicity** 

Aquatic toxicity:

No further relevant information available.

Persistence and degradability:

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential:

No further relevant information available.

Mobility in soil:

No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable Other adverse effects

No further relevant information available.

# 13. Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

**Recommendation:** 

Disposal must be made according to official regulations.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

# 14. Transport information

**UN-Number** 

IATA / IMDG / ADR: UN1230

**UN** proper shipping name

ADR: 1230 METHANOL IMDG: METHANOL

IATA: METHANOL, solution

Transport hazard class(es)

IATA / IMDG / ADR

Class: 6.1 Toxic substances.

Label: 6.1

Packing group:

IATA / IMDG / ADR:

**Environmental hazards** 

Marine pollutant: No

**Special precautions for user:** Warning: Toxic substances.

Transport in bulk according to Annex II of MARPOL73/78 and

the IBC Code: Not applicable.

UN "Model Regulation": UN1230, METHANOL, 6.1, II

# 15. Regulatory information

# Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

# 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.

2/25/2014