# Subtilisin Inhibitor I: sc-358555



# MATERIAL SAFETY DATA SHEET

The Power to Question

# **Section 1: Product & Company Identification**

**Product Name:** Subtilisin Inhibitor I

Catalog Number: sc-358555

Synonyms: **BOC-ALA-ALA-NHO-BZ** 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

#### **Section 2: Hazards identification**

Classification of the substance or mixture

Classification under CHIP: Xn: R20/21/22; Xi: R36/37/38

Classification under CLP: Acute Tox. 4: H302+312+332; STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315 Most important adverse effects: Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Label elements

Label elements under CLP

#### **Hazard statements**

H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



### **Precautionary statements**

P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

# Label elements under CHIP

Hazard symbols: Harmful



#### Risk phrases:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

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. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

#### Other hazards

PBT: This substance is not identified as a PBT substance.

# Section 3: Composition/information on ingredients

**Substances** 

Chemical identity: SUBTILISIN INHIBITOR I

#### Section 4: First aid measures

#### Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a liter of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

Indication of any immediate medical attention and special treatment needed

### **Section 5: Fire-fighting measures**

Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Carbon dioxide, dry chemical powder, foam.

Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes. Carbon oxides. Nitrogen oxides (NOx).

Advice for fire-fighters

**Advice for fire-fighters:** W ear self-contained breathing apparatus. W ear protective clothing to prevent contact with skin and eyes.

### Section 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorized personnel.

**Environmental precautions** 

Environmental precautions: Do not discharge into drains or rivers.

Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

## Section 7: Handling and storage

Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood.

#### Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Light Sensitive. Moisture sensitive. Store under Argon. Store at room temperature.

Suitable packaging: Must only be kept in original packaging.

Specific end use(s)

Specific end use(s): No data available.

### Section 8: Exposure controls/personal protection

**Control parameters** 

Workplace exposure limits: Not applicable.

**Exposure controls** 

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory

protective device with particle filter.

Hand protection: Protective gloves. Ensure eye bath is to hand.

**Eye protection:** Safety glasses. **Skin protection:** Protective clothing.

# Section 9: Physical and chemical properties

Information on basic physical and chemical properties

State: Solid

Molecular Weight: 256.28 Molecular Formula: C11H18N3O4

Also soluble in: Ethanol. Methanol. Dimethylsulfoxide. Acetonitrile.

Other information

Other information: Not applicable.

# Section 10: Stability and reactivity

Reactivity

Reactivity: Stable under recommended transport or storage conditions.

Chemical stability

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

**Conditions to avoid** 

Conditions to avoid: Heat. Light. Moist air. Humidity.

Incompatible materials

Materials to avoid: Strong oxidizing agents. Strong acids.

Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide/carbon monoxide. Nitrogen oxides

(NOx).

## **Section 11: Toxicological information**

#### Information on toxicological effects

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH DRM ING	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	INH	Based on test data

#### Symptoms/routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

## **Section 12: Ecological information**

**Toxicity** 

Ecotoxicity values: Not applicable. Persistence and degradability

Persistence and degradability: No data available.

Bioaccumulative potential

Bioaccumulative potential: No data available.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

Other adverse effects

Other adverse effects: No data available.

# **Section 13: Disposal considerations**

Waste treatment methods

Disposal operations: MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL

**REGULATIONS** 

Disposal of packaging: Dispose of as special waste in compliance with local and national regulations Observe all federal,

state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

# **Section 14: Transport information**

**UN** number

UN number: UN none UN proper shipping name

Shipping name: NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

Transport hazard class: N/A

Packing group: N/A Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

Special precautions for user: N/A

### **Section 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

**Chemical Safety Assessment** 

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

### **Section 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.

7/9/2012