



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 25-Jul-2018

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name Bendazac L-Lysine

### Other means of identification

Product Code SC-337554

Synonyms None

### Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

### Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.

10410 Finnell Street

Dallas, TX 75220

831.457.3800

800.457.3801

scbt@scbt.com

### Emergency telephone number

Chemtrec

1.800.424.9300 (Within USA)

+1.703.527.3887 (Outside USA)

## 2. HAZARDS IDENTIFICATION

### Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

Signal word Not classified

Hazard statements

Symbols/Pictograms

Precautionary Statements - Prevention

Wash hands thoroughly after handling

Precautionary Statements -

IF exposed or concerned: Get medical advice/attention

Response

### Other Information

Health hazards not otherwise classified (HHNOC)

Not applicable

Physical hazards not otherwise classified (PHNOC)

Not applicable

Other hazards

May be harmful if swallowed

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 81919-14-4

Molecular Weight 428.48

Formula  $C_{16}H_{14}N_2O_3 \cdot C_6H_{14}N_2O_2$

| Chemical name | CAS No. | Weight-% | Hazardous Material Information<br>Review Act registry number<br>(HMIRA registry #) | Date HMIRA filed and date<br>exemption granted (if applicable) |
|---------------|---------|----------|--|--|
|               |         |          |  |  |

|                   |            |     |   |   |
|-------------------|------------|-----|---|---|
| Bendazac L-Lysine | 81919-14-4 | 100 | - | - |
|-------------------|------------|-----|---|---|

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|                |   |
|----------------|---|
| General advice | Consult a physician if necessary. Remove to fresh air.  |
| Inhalation     | Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. |
| Eye contact    | Wash with plenty of water.  |
| Skin contact   | Wash skin with soap and water.  |
| Ingestion      | Never give anything by mouth to an unconscious person. Clean mouth with water.                              |

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

|          |                           |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

##### Indication of any immediate medical attention and special treatment needed

|                    |                        |
|--------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|--------------------|------------------------|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

|                                |   |
|--------------------------------|---|
| Suitable Extinguishing Media   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | No information available.   |

##### Specific hazards arising from the chemical

|  |                                       |
|--|---------------------------------------|
| Specific hazards arising from the chemical | No information available.             |
| Hazardous combustion products              | Carbon oxides. Nitrogen oxides (NOx). |

##### Explosion data

|                                  |                           |
|----------------------------------|---------------------------|
| Sensitivity to mechanical impact | No information available. |
| Sensitivity to static discharge  | No information available. |

##### Special protective equipment for fire-fighters

|  |  |
|--|--|
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
|--|--|

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

|                      |  |
|----------------------|--|
| Personal precautions | Ensure adequate ventilation, especially in confined areas. |
|----------------------|--|

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

|                         |   |
|-------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers.  |

#### 7. HANDLING AND STORAGE

##### Precautions for safe handling

|                         |   |
|-------------------------|---|
| Advice on safe handling | Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. |
|-------------------------|---|

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

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at -20 °C

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

Engineering controls Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

Eye/face protection Wear safety glasses with side shields (or goggles).  
Skin and body protection Wear protective gloves and protective clothing.  
Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.  
General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                |                          |
|----------------|--------------------------|
| Physical State | Solid                    |
| Appearance     | No information available |
| color          | No information available |
| Odor           | No information available |
| Odor Threshold | No information available |

**Property****Values**

|                              |                           |
|------------------------------|---------------------------|
| pH                           | No information available  |
| Melting point/freezing point | No information available  |
| Boiling point/boiling range  | No information available  |
| Flash point                  | No information available  |
| Evaporation rate             | No information available  |
| Flammability (solid, gas)    | No information available  |
| Flammability Limits in Air   |                           |
| Upper flammability limits    | No information available  |
| Lower flammability limit     | No information available  |
| Vapor pressure               | No information available  |
| Vapor density                | No information available  |
| Relative Density             | No information available  |
| Water solubility             | No information available  |
| Solubility in other solvents | No information available  |
| Partition coefficient        | No information available  |
| Autoignition temperature     | No information available  |
| Decomposition temperature    | No information available  |
| Kinematic viscosity          | No information available  |
| Dynamic viscosity            | No information available  |
| Explosive properties         | No information available. |
| Oxidizing properties         | No information available. |
| Softening point              | No information available  |
| VOC Content (%)              | No information available  |
| Liquid Density               | No information available  |
| Bulk density                 | No information available  |

## 10. STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | Not applicable.                              |
| Stability                          | Stable under normal conditions.              |
| Possibility of hazardous reactions | None under normal processing.                |
| Hazardous polymerization           | No information available.                    |
| Conditions to avoid                | Extremes of temperature and direct sunlight. |
| Incompatible materials             | Strong oxidizing agents.                     |
| Hazardous Decomposition Products   | Carbon oxides. Nitrogen oxides (NOx).        |

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|              |                    |
|--------------|--------------------|
| Inhalation   | No data available. |
| Eye contact  | No data available. |
| Skin contact | No data available. |
| Ingestion    | No data available. |

### Symptoms related to the physical, chemical and toxicological characteristics

|          |                           |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

|               |                |
|---------------|----------------|
| ATEmix (oral) | 3,100.00 mg/kg |
|---------------|----------------|

|                        |   |
|------------------------|---|
| Unknown acute toxicity | 0 % of the mixture consists of ingredient(s) of unknown toxicity                              |
|                        | 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity                   |
|                        | 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity                 |
|                        | 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)       |
|                        | 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)     |
|                        | 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist) |

| Chemical name                   | Oral LD50            | Dermal LD50 | Inhalation LC50 |
|---------------------------------|----------------------|-------------|-----------------|
| Bendazac L-Lysine<br>81919-14-4 | = 3100 mg/kg ( Rat ) | -           | -               |

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                                   |                           |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation         | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity            | No information available. |
| Reproductive toxicity             | No information available. |
| STOT - single exposure            | No information available. |
| STOT - repeated exposure          | No information available. |
| Aspiration hazard                 | No information available. |
| Carcinogenicity                   | No information available. |

## 12. ECOLOGICAL INFORMATION

|                               |   |
|-------------------------------|---|
| Ecotoxicity                   | May cause long lasting harmful effects to aquatic life. |
| Persistence and degradability | No information available.                               |
| Bioaccumulation               | No information available.                               |

Mobility No information available.  
 Other adverse effects No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.  
 Contaminated packaging Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

**TDG** Not regulated  
**IATA** Not regulated  
**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable  
**The Stockholm Convention on Persistent Organic Pollutants** Not applicable  
**The Rotterdam Convention** Not applicable

#### International Inventories

All of the components in the product are on the following Inventory lists  
 South Korea (KECL):

| Chemical name     | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Bendazac L-Lysine | -    | -   | -    | -      | -      | -    | -     | X    | -     | -    |

X - Listed

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

### 16. OTHER INFORMATION

**NFPA** Health hazards 0 Flammability 0 Instability 0 Physical and chemical properties -  
**HMIS** Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

|                |  |           |  |
|----------------|--|-----------|--|
| TWA<br>Ceiling | TWA (time-weighted average)<br>Maximum limit value | STEL<br>* | STEL (Short Term Exposure Limit)<br>Skin designation |
|----------------|--|-----------|--|

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Revision date** 25-Jul-2018

**Revision note** No information available.

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**