



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 05-Jun-2019

Version 1.2

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

### Product identifier

Product Name 1,3-Propanedithiol  
Product Code SC-237736

### 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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification

Serious eye damage/eye irritation  
Specific target organ toxicity (single exposure)  
Flammable liquids

Category 2A  
Category 3  
Category 4

### Label elements

Signal word  
Hazard statements

Warning  
Causes serious eye irritation  
May cause respiratory irritation  
Combustible liquid

Symbols/Pictograms



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
In case of fire: Use CO2, dry chemical, or foam for extinction  
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Storage



Precautionary Statements - Disposal

Store locked up  
Dispose of contents/container to an approved waste disposal plant**Hazards not otherwise classified (HNOC)**

Hazards not otherwise classified (HNOC)

Not applicable

**Other Information**

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity.

**NFPA**

|                                  |   |
|----------------------------------|---|
| Health hazards                   | 2 |
| Flammability                     | 2 |
| Stability                        | 0 |
| Physical and chemical properties | - |

**HMIS**

|                     |   |
|---------------------|---|
| Health hazards      | 2 |
| Flammability        | 2 |
| Physical hazards    | 0 |
| Personal protection | - |

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

|                  |  |
|------------------|--|
| CAS No           | 109-80-8                                     |
| Molecular Weight | 108.23                                       |
| Formula          | C <sub>3</sub> H <sub>6</sub> S <sub>2</sub> |

| Chemical name      | CAS No.  | Weight-% | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------|----------|----------|-----------|-------------|-----------------|
| 1,3-Propanedithiol | 109-80-8 | >98      | -         | -           | -               |

**4. FIRST AID MEASURES****First Aid Measures**

|                |   |
|----------------|---|
| General advice | Consult a physician if necessary. Remove to fresh air.  |
| Eye contact    | Wash with plenty of water.  |
| Skin Contact   | Wash skin with soap and water.  |
| Inhalation     | Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. |
| 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 Hydrogen sulfide. Carbon oxides.

**Explosion data**



Sensitivity to Mechanical Impact No information available.  
Sensitivity to Static Discharge No information available.

**Protective equipment and precautions for firefighters**

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

Environmental precautions See Section 12 for additional Ecological Information.

**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 Noxious vapor/odor. Ensure adequate ventilation, especially in confined areas.

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

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature.  
Incompatible materials None known based on information supplied.

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

Exposure Guidelines 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 Ensure adequate ventilation, especially in confined areas

**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 If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.  
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**



|                |                          |
|----------------|--------------------------|
| Physical State | liquid                   |
| Appearance     | No information available |
| Odor           | No information available |

| <u>Property</u>              | <u>Values</u>            |
|------------------------------|--------------------------|
| pH                           | No information available |
| Melting point/freezing point | -79 °C                   |
| Boiling point                | 169 °C                   |
| Flash point                  | 61 °C CC (closed cup)    |
| Liquid Density               | 1.078 g/mL               |
| Evaporation rate             | No information available |
| Upper flammability limits    | No information available |
| Lower flammability limit     | No information available |
| Vapor pressure               | 7 mmHg                   |
| Vapor density                | 3.74                     |
| Specific gravity             | 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 |
| Explosive properties         | No information available |
| Oxidizing properties         | No information available |

## 10. STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | Not applicable                               |
| Chemical stability                 | Stable under recommended storage 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   | Hydrogen sulfide. Carbon oxides.             |

## 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. |

### Information on toxicological effects

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

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

|                  |                           |
|------------------|---------------------------|
| Chronic Toxicity | No information available. |
|------------------|---------------------------|

### Numerical measures of toxicity - Product Information

|                        |   |
|------------------------|---|
| Unknown acute toxicity | 100% of the mixture consists of ingredient(s) of unknown toxicity |
|------------------------|---|

## 12. ECOLOGICAL INFORMATION



Ecotoxicity May cause long lasting harmful effects to aquatic life  
 100% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability No information available.  
 Bioaccumulation No information available.  
 Mobility No information available.

### 13. DISPOSAL CONSIDERATIONS

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.  
 Contaminated packaging Do not reuse container.

### 14. TRANSPORT INFORMATION

#### DOT

UN/ID no UN3334  
 Hazard Class 9  
 Proper shipping name Aviation regulated liquid, n.o.s.  
 Description UN3334, Aviation regulated liquid, n.o.s., 9  
 Emergency Response Guide Number 171

#### IMDG

UN/ID no UN3334  
 Hazard Class 9  
 Proper shipping name Aviation regulated liquid, n.o.s.  
 Description UN3334, Aviation regulated liquid, n.o.s., 9  
 Special Provisions 960

#### IATA

UN/ID no UN3334  
 Hazard Class 9  
 Packing Group III  
 Proper shipping name Aviation regulated liquid, n.o.s.  
 Description UN3334, Aviation regulated liquid, n.o.s., 9, III  
 ERG Code 9A

### 15. REGULATORY INFORMATION

#### International Inventories

All of the components in the product are on the following inventory lists

TSCA (United States): Canada (DSL/NDL) Europe (EINECS/ELINCS/NLP) Australia (AICS) China (IECSC) Philippines (PICCS)

| Chemical name      | TSCA | DSL | NDL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--------------------|------|-----|-----|--------|--------|------|-------|------|-------|------|
| 1,3-Propanedithiol | X    | -   | X   | X      | -      | -    | X     | -    | X     | X    |

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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

## US Federal Regulations

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### **SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive hazard                   | No  |

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## US State Regulations

### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

## **16. OTHER INFORMATION**

|               |                          |
|---------------|--------------------------|
| 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**