



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 14-Feb-2019

Version 1.3

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

### Product identifier

Product Name Ammonium Sulfate  
Product Code SC-29085

### 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

Acute toxicity - Dermal Category 4

### Label elements

Signal word Warning  
Hazard statements May be harmful if swallowed  
Harmful in contact with skin

Symbols/Pictograms



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
Dispose of contents/container to an approved waste disposal plant

Precautionary Statements - Disposal

### Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

### Other Information

Other hazards Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**NFPA** Health hazards 0  
Flammability 1  
Stability 0  
Physical and chemical properties -



**HMIS** Health hazards 1  
Flammability 1  
Physical hazards 0  
Personal protection -



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 7783-20-2  
 Molecular Weight 132.1  
 Formula (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>

| Chemical name    | CAS No.   | Weight-% | Oral LD50            | Dermal LD50          | Inhalation LC50 |
|------------------|-----------|----------|----------------------|----------------------|-----------------|
| Ammonium Sulfate | 7783-20-2 | >98      | = 2840 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | -               |

### 4. FIRST AID MEASURES

#### First Aid Measures

**General advice** Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact** Wash off immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation** Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Artificial respiration and/or oxygen may be necessary Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician

**Ingestion** Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

**Self-protection of the first aider** Remove all sources of ignition. Use personal protective equipment as required.

#### 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. Nitrogen oxides (NOx).

#### 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 Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

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

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. 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 Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

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

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, 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 Tight sealing safety goggles. Face protection shield.



|                                |   |
|--------------------------------|---|
| 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 | When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.  |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                              |                          |
|------------------------------|--------------------------|
| Physical State               | Solid                    |
| Appearance                   | powder                   |
| Odor                         | May be unpleasant        |
| <b><u>Property</u></b>       | <b><u>Values</u></b>     |
| pH                           | No information available |
| Melting point/freezing point | 280 °C                   |
| Boiling point                | No information available |
| Flash point                  | No information available |
| Liquid Density               | 1.77 g/cm <sup>3</sup>   |
| Evaporation rate             | No information available |
| Upper flammability limits    | No information available |
| Lower flammability limit     | No information available |
| Vapor pressure               | No information available |
| Vapor density                | No information available |
| Specific gravity             | No information available |
| Water solubility             | No information available |
| Solubility in other solvents | No information available |
| Partition coefficient        | -5.1                     |
| Autoignition temperature     | No information available |
| Decomposition temperature    | 280 °C                   |
| 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                | Heat, flames and sparks.                     |
| Incompatible materials             | Strong oxidizing agents.                     |
| Hazardous Decomposition Products   | Hydrogen sulfide. 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. |



**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 Avoid repeated exposure.

**Numerical measures of toxicity - Product Information**

Unknown acute toxicity No information available  
 The following values are calculated based on chapter 3.1 of the GHS document  
 ATEmix (oral) 2840 mg/kg  
 ATEmix (dermal) 2000 mg/kg

**12. ECOLOGICAL INFORMATION**

Ecotoxicity Harmful to aquatic life with long lasting effects

| Chemical name                 | Algae/aquatic plants | Fish   | Toxicity to Microorganisms | Crustacea  |
|-------------------------------|----------------------|--|----------------------------|--|
| Ammonium Sulfate<br>7783-20-2 | -                    | 460 - 1000: 96 h Leuciscus idus mg/L LC50 static 126: 96 h Poecilia reticulata mg/L LC50 123 - 128: 96 h Poecilia reticulata mg/L LC50 semi-static 100: 96 h Pimephales promelas mg/L LC50 5.2 - 8.2: 96 h Oncorhynchus mykiss mg/L LC50 static 32.2 - 41.9: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18: 96 h Cyprinus carpio mg/L LC50 420: 96 h Brachydanio rerio mg/L LC50 semi-static 480: 96 h Brachydanio rerio mg/L LC50 flow-through 250: 96 h Brachydanio rerio mg/L LC50 | -                          | 423: 24 h Daphnia magna mg/L EC50 14: 48 h Daphnia magna mg/L LC50 |

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

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

| Chemical name                 | Partition coefficient |
|-------------------------------|-----------------------|
| Ammonium Sulfate<br>7783-20-2 | -5.1                  |

**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.  
 Other Information Waste codes should be assigned by the user based on the application for which the product was used.  
 US EPA Waste Number D001

**14. TRANSPORT INFORMATION**



DOT Not regulated

IMDG Not regulated

IATA Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

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

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)  
ENCS (Japan): Philippines (PICCS)

| Chemical name    | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Ammonium Sulfate | X    | X   | -    | X      | -      | X    | X     | X    | X     | 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

### 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                       | No  |
| 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**

## 16. OTHER INFORMATION

Revision note No information available

### **Disclaimer**



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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**