



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 31-Aug-2018

Version 1.4

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

### Product identifier

Product Name Glycerol  
Product Code SC-29095

### 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 Category 2B

### Label elements

Signal word Warning  
Hazard statements Causes eye irritation  
Symbols/Pictograms

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

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

### 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 0  
Flammability 1  
Stability 0  
Physical and chemical properties -



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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 56-81-5  
 Molecular Weight 92.09  
 Formula C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol	56-81-5	>98	-	-	-

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

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. 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 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 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. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Dam up. Use personal protective equipment as required. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 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. Protect from moisture. Store at room temperature.

Incompatible materials None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Exposure Guidelines .

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerol 56-81-5	-	TWA: 15 mg/m <sup>3</sup> mist, total particulate TWA: 5 mg/m <sup>3</sup> mist, respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate (vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction	-

### Appropriate engineering controls

Engineering Controls Showers  
Eyewash stations  
Ventilation systems

**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	liquid
Appearance	oil
Odor	May be unpleasant
<b><u>Property</u></b>	<b><u>Values</u></b>
pH	No information available
Melting point/freezing point	20 °C
Boiling point	182 °C
Flash point	160 °C CC (closed cup)
Liquid Density	1.25 g/mL
Evaporation rate	No information available
Upper flammability limits	19%
Lower flammability limit	2.7%
Vapor pressure	0.0025 mmHg
Vapor density	3.18
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	Heat, flames and sparks. Exposure to air or moisture over prolonged periods.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	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 Avoid repeated exposure.  
 Target Organ Effects Eyes, Respiratory system, Kidney, Skin.

**Numerical measures of toxicity - Product Information**

Unknown acute toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity  
 The following values are calculated based on chapter 3.1 of the GHS document  
 ATEmix (oral) 12600  
 ATEmix (dermal) 10000  
 ATEmix (inhalation-dust/mist) 0.1  
 ATEmix (inhalation-vapor) 570

**12. ECOLOGICAL INFORMATION**

Ecotoxicity May cause long lasting harmful effects to aquatic life

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Glycerol 56-81-5	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	-	500: 24 h Daphnia magna mg/L EC50

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
Glycerol 56-81-5	-1.76

**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.

**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
Glycerol	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**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Glycerol 56-81-5	X	X	X

**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**