



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 10-Sep-2018

Version 1.4

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

### Product identifier

Product Name Butylated hydroxytoluene (BHT)  
Product Code SC-204659

### 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  
Serious eye damage/eye irritation

Category 4  
Category 2A

### Label elements

Signal word  
Hazard statements

Warning  
May be harmful if swallowed  
Harmful in contact with skin  
Causes serious eye irritation

Symbols/Pictograms



Precautionary Statements - Prevention

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

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

<b>NFPA</b>	Health hazards	2		<b>HMIS</b>	Health hazards	0
	Flammability	1			Flammability	1
	Stability	0			Physical hazards	0
	Physical and chemical properties	*			Personal protection	-

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 128-37-0  
Molecular Weight 220.35  
Formula C<sub>15</sub>H<sub>24</sub>O

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Butylated hydroxytoluene (BHT)	128-37-0	>98	> 2930 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-

### 4. FIRST AID MEASURES

#### First Aid Measures

General advice	Immediate medical attention is required. 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	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
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	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

#### 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 No information available.



chemical  
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      Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**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      Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. 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      Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

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

Storage Conditions      Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. 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
Butylated hydroxytoluene (BHT) 128-37-0	TWA: 2 mg/m <sup>3</sup> inhalable fraction and vapor	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

### 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. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State                                Solid  
Appearance                                    crystalline  
Odor    No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	69 °C
Boiling point	265 °C
Flash point	127 °C CC (closed cup)
Liquid Density	1.05 g/cm <sup>3</sup>
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	0.01 mmHg
Vapor density	7.6
Specific gravity	1.05
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	5.1
Autoignition temperature	470.0 °C
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      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, Skin.  
Carcinogenicity                                The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Butylated hydroxytoluene (BHT) 128-37-0	-	Group 3	-	-

*IARC (International Agency for Research on Cancer) Not classifiable as a human carcinogen*

### 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)                                  2930 mg/kg  
ATEmix (dermal)                                2000 mg/kg

## 12. ECOLOGICAL INFORMATION

Ecotoxicity                                        Very toxic to aquatic life with long lasting effects

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Butylated hydroxytoluene (BHT) 128-37-0	0.42: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	5: 48 h <i>Oryzias latipes</i> mg/L LC50	-	-

0% 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.

Chemical name	Partition coefficient
Butylated hydroxytoluene (BHT) 128-37-0	4.17

## 13. DISPOSAL CONSIDERATIONS

Disposal of wastes                              Disposal should be in accordance with applicable regional, national and local laws and regulations.



Contaminated packaging  
Other Information

Do not reuse container.  
Waste codes should be assigned by the user based on the application for which the product was used.

## 14. TRANSPORT INFORMATION

### DOT

UN/ID no UN3077  
Hazard Class 9  
Packing Group III  
Proper shipping name Environmentally hazardous substance, solid, n.o.s.  
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Butylated hydroxytoluene (BHT)), 9, III, Marine pollutant  
Emergency Response Guide Number 171

### IMDG

UN/ID no UN3077  
Hazard Class 9  
Packing Group III  
Proper shipping name Environmentally hazardous substance, solid, n.o.s.  
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Butylated hydroxytoluene (BHT)), 9, III, Marine pollutant  
Special Provisions 274, 335, 966, 967, 969  
EmS-No F-A, S-F

### IATA

UN/ID no UN3077  
Hazard Class 9  
Packing Group III  
Proper shipping name Environmentally hazardous substance, solid, n.o.s.  
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Butylated hydroxytoluene (BHT)), 9, III  
ERG Code 9L

## 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
Butylated hydroxytoluene (BHT)	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	Yes
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
Butylated hydroxytoluene (BHT) 128-37-0	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**