



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 27-May-2015

Version 1

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

### Product identifier

Product Name 4-tert-Butylcyclohexanol, mixture of cis and trans  
Product Code SC-226796

### 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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

### Classification

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

### Label elements

Signal word Not classified  
Hazard statements  
Symbols/Pictograms Not classified  
Precautionary Statements - Prevention Wash hands thoroughly after handling  
Precautionary Statements - Response IF exposed or concerned: Get medical advice/attention

### Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

### Other Information

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 98-52-2  
Molecular Weight 156.27  
Formula C<sub>10</sub>H<sub>20</sub>O

Chemical Name	CAS No	Weight %	Oral LD50	Dermal LD50	Inhalation LC50
---------------	--------	----------	-----------	-------------	-----------------

4-tert-Butylcyclohexanol, mixture of cis and trans	98-52-2	>98	= 3620 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-
--	---------	-----	----------------------	---------------------	---

#### 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 None.

##### 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 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 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.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Advice on safe handling 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 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 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 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 Solid

Appearance No information available

Odor No information available

### Property

pH No information available

Melting point/freezing point 62 °C

Boiling point 110 °C

Flash point 105 °C

Density No information available

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 No information available

Autoignition temperature No information available

Decomposition temperature No information available

Kinematic viscosity No information available

### Values

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 No information available.

### 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) 3620 mg/kg  
 ATEmix (dermal) 5000 mg/kg

## 12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
4-tert-Butylcyclohexanol, mixture of cis and trans 98-52-2	29: 72 h Desmodemus subspicatus mg/L EC50	17: 48 h Leuciscus idus mg/L LC50 static	-	46: 48 h Daphnia magna mg/L EC50

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
4-tert-Butylcyclohexanol, mixture of cis and trans 98-52-2	3.23

## 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 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/NDL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)  
ENCS (Japan): Philippines (PICCS)

Chemical Name	TSCA	DSL	NDL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
4-tert-Butylcyclohexanol, mixture of cis and trans	X	X	-	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 No  
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

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**