

The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.
Revision date 24-Feb-2016
Version 1

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

Product identifier

Product Name Borneol
Product Code SC-255003

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 - Oral Category 4
Flammable solid Category 2

Label elements

Signal word Hazard statements

Symbols/Pictograms

Warning

Harmful if swallowed Flammable solid





Precautionary Statements - Prevention Wash face, hands and any exposed skin thoroughly after

handling

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces. — No

Ground/bond container and receiving equipment

Wear protective gloves/protective clothing/eye protection/face

protection

Precautionary Statements - Response IF exposed or concerned: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Dispose of contents/container to an approved waste disposal

plant

Hazards not otherwise classified (HNOC)

Precautionary Statements - Disposal

Hazards not otherwise classified (HNOC)

Not applicable

Other Information



NFPA Health hazards 2 Flammability 2 0

Stability Physical and chemical

properties



HMIS

Health hazards 2 Flammability 2 Physical hazards 0 Personal protection

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 507-70-0 Molecular Weight 154.25 Formula C₁₀H₁₈O

Chemical Name	CAS No	Weight %	Oral LD50	Dermal LD50	Inhalation LC50
Borneol	507-70-0	>98	= 500 mg/kg (Rat)	-	-

4. FIRST AID MEASURES

First Aid Measures

General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do

not get in eyes, on skin, or on clothing.

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and Eye contact

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms

persist, call a physician.

Skin Contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes.

Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial Inhalation

respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce

vomiting.

Self-protection of the first aider 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 None.

Specific hazards arising from the chemical

Specific hazards arising from the

No information available.

chemical

Ingestion

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 As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

for firefighters

(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 Prevent entry into waterways, sewers, basements or confined areas. 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

Prevent further leakage or spillage if safe to do so. Methods for containment

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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray.

Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of Storage Conditions

children. 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 Tight sealing safety 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.

Handle in accordance with good industrial hygiene and safety practice. General Hygiene Considerations



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance No information available Odor No information available

Property Values

No information available pН Melting point/freezing point No information available Boiling point No information available Flash point No information available 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 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

No data available. Inhalation Eye contact No data available. Skin Contact No data available. No data available. Ingestion

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) 500 mg/kg



12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life

100% 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.

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

UN/ID no UN1312 **Hazard Class** 4.1 Packing Group Ш Proper shipping name Borneol

UN1312, Borneol, 4.1, III Description

Emergency Response Guide Number 133

IMDG

UN/ID no UN1312 **Hazard Class** 4.1 Packing Group Ш Proper shipping name Borneol

Description UN1312, Borneol, 4.1, III

EmS-No F-A. S-I

IATA

UN/ID no UN1312 **Hazard Class** 4.1 Ш Packing Group Proper shipping name Borneol

Description UN1312, Borneol, 4.1, III

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
Borneol	Х	Χ	-	Х	-	Х	Х	Χ	Х	Χ

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 Nο Fire hazard Yes Sudden release of pressure hazard Nο 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
Borneol	X	X	X
507-70-0			

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