

# (-)-Piperitone: sc-296096



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** (-)-Piperitone  
**Product Number:** sc-296096  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

**OSHA Haz Com: CFR 1910.1200**

Skin Corrosion/Irritation [Category 2]

Flammable Liquids [Category 4]

#### Label elements, including precautionary statements

Pictogram



Signal word

Warning

#### Hazard statement(s)

Causes skin irritation

Combustible liquid

#### Precautionary statement(s)

#### Prevention

Wash hands and face thoroughly after handling. Wear protective gloves. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Wear protective gloves, eye protection and face protection.

#### Response

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish.

#### Storage

Store in well-ventilated place. Keep cool.

#### Disposal

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms:** (-)-p-Menth-1-en-3-one; (-)-6-Isopropyl-3-methyl-2-cyclohexen-1-one

**Formula:** C<sub>10</sub>H<sub>16</sub>O

**Molecular weight:** 152.23

**CAS #:** 4573-50-6

## 4. FIRST AID MEASURES

### **If inhaled**

Call emergency medical service. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### **In case of skin contact**

Call a poison center or doctor if you feel unwell. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### **In case of eye contact**

If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. Contact with material may irritate or burn eyes. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves..

### **If swallowed**

Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### **Symptoms/Effects**

**Acute :** Redness

**Delayed:** No data available

### **Immediate medical attention**

If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## 5. FIREFIGHTING MEASURES

### **Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.

### **Hazardous combustion products**

These products include: Carbon oxides

### **Other specific hazards**

Closed containers may explode from heat of a fire.

### **Special precautions for firefighters**

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk.

### **Special protective equipment for fire-fighters**

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions**

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Personal protective equipment**

Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

**Emergency procedures**

Isolate area until gas has dispersed. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

**Methods and materials for containment and cleaning up**

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

Do NOT breathe gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

**Conditions for safe storage**

Keep only in the original container in a cool well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store at 4° C.

**Storage incompatibilities**

Store away from oxidizing agents and combustible substances.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Exposure limits**

No data available

**Engineering controls**

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

**Personal protective equipment****Respiratory protection**

Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

**Hand protection**

Wear protective gloves.

**Skin and body protection**

Lab coat.

**Eye protection**

Splash goggles.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	liquid	pH	no data available
Melting point/freezing point	-20° C	Boiling point	235° C
Flash point	93° C	Ignition temperature	no data available
Autoignition temperature	no data available	Lower explosion limit	no data available
Explosion limits	no data available	Vapor pressure	no data available
Relative Density	0.94 g/mL	Relative vapor density	no data available
Odor	no data available	Odor Threshold	no data available
Evaporation rate	no data available	Decomposition temperature	no data available
Kinematic Viscosity	no data available	Dynamic Viscosity	no data available
Partition coefficient	$\log P_{ow} = 2.5$	Solubility	Insoluble in water

n-octanol/water

## 10. STABILITY AND REACTIVITY

### Chemical reactivity

no data available

### Chemical stability

Stable under recommended storage conditions

### Possibility of Hazardous Reactions

In use, may form flammable/explosive vapor-air mixture.

### Materials to avoid

Oxidizing agents

### Conditions to avoid

Avoid excessive heat and light.

### Hazardous decomposition products

No hazardous reactivity has been reported

## 11. TOXICOLOGICAL INFORMATION

RTECS: Not available

### Acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No data available

NTP: No data available

OSHA: No data available

### Reproductive toxicity

no data available

### Routes of exposure

Inhalation, eye contact, ingestion, skin contact

### Signs and Symptoms of Exposure

Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering.

Skin contact may result in redness, pain or dry skin. Overexposure may result in serious illness or death.

### Potential health effects

Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Overexposure may result in serious illness or death.

### Target organs

No data available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Fish:** No data available

**Crustacea:** No data available

**Algae:** No data available

### Persistence and degradability

No data available

### Bioaccumulative potential (BCF)

No data available

### Mobility in soil

No data available

### Soil adsorption (Koc)

No data available

### Henry's Law constant (PaM<sup>3</sup>/mol)

No data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. Observe all federal, state and local regulations when disposing of the substance.

### Contaminated packaging

Dispose of as unused product. Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

### Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

### US Federal Regulations

#### CERCLA Hazardous substance and Reportable Quantity:

**SARA 313:** Not Listed

**SARA 302:** Not Listed

### State Regulations

#### State Right-to-Know

**Massachusetts** Not Listed

**New Jersey** Not Listed

**Pennsylvania** Not Listed

**California Proposition 65** Not Listed

### HMIS Classification

**Health hazard:** 2

**Flammability:** 1

**Physical hazards:** 0

### NFPA Rating

**Health hazard:** 2

**Fire:** 1

**Reactivity Hazard:** 0

### International Inventories

#### WHMIS hazard class:

B3: Combustible Liquid.

D2B: Materials causing other toxic effects. (Toxic)

Canada DSL: On DSL  
EC-No: 201-942-7  
Notice Through Official Gazettes Reference Number: (Japan)  
ENCS: (3)-2393

## **16. OTHER INFORMATION**

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

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