



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 12-Feb-2015

Version 1.1

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

### Product identifier

Product Name 2-Methyl-2-pentenal  
Product Code SC-230507

### 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 - Inhalation (Dusts/Mists)  
Serious eye damage/eye irritation  
Flammable liquids

Category 3  
Category 1  
Category 3

### Label elements

Signal word  
Hazard statements

Danger  
Toxic if inhaled  
Causes serious eye damage  
FLAMMABLE LIQUID AND VAPOR

Symbols/Pictograms



Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool



## 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  
 Immediately call a POISON CENTER or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction  
 Store in a well-ventilated place. Keep container tightly closed  
 Store locked up  
 Dispose of contents/container to an approved waste disposal plant

## Precautionary Statements - Storage

## Precautionary Statements - Disposal

**Hazards not otherwise classified (HNOC)**

Hazards not otherwise classified (HNOC)

Not applicable

**Other Information**

|             |                                  |   |  |             |                     |   |
|-------------|----------------------------------|---|--|-------------|---------------------|---|
| <b>NFPA</b> | Health hazards                   | 2 |  | <b>HMIS</b> | Health hazards      | 2 |
|             | Flammability                     | 3 |  |             | Flammability        | 3 |
|             | Stability                        | 0 |  |             | Physical hazards    | 0 |
|             | Physical and chemical properties | - |  |             | Personal protection | - |
|             |                                  |   |  |             |                     |   |

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS No 623-36-9  
 Molecular Weight 98.14  
 Formula C<sub>6</sub>H<sub>10</sub>O

| Chemical Name       | CAS No   | Weight % | Oral LD50 | Dermal LD50 | Inhalation LC50        |
|---------------------|----------|----------|-----------|-------------|------------------------|
| 2-Methyl-2-pentenal | 623-36-9 | >98      | -         | -           | = 2000 ppm ( Rat ) 4 h |

**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).  
 Eye contact Wash with plenty of water.  
 Skin Contact Wash off immediately with plenty of 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.  
 Self-protection of the first aider Remove all sources of ignition.

**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 | Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. |
|----------------------|--|

### Environmental precautions

|                           |   |
|---------------------------|---|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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 | Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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. |
|-------------------------|--|

### Conditions for safe storage, including any incompatibilities

|                        |  |
|------------------------|--|
| Storage Conditions     | Keep tightly closed in a dry and cool 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 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 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 No information available  
Odor No information available

### Property

Values  
pH No information available  
Melting point/freezing point No information available  
Boiling point 137 °C  
Flash point 32 °C CC (closed cup)  
Density 0.86 g/mL  
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 Heat, flames and sparks.  
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 (inhalation-dust/mist)  | 0.5 mg/l                 |
| ATEmix (inhalation-vapor)  | 2000 mg/l                |

## 12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life

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. |

## 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

|                                 |                                   |
|---------------------------------|-----------------------------------|
| UN/ID no                        | UN1989                            |
| Hazard Class                    | 3                                 |
| Packing Group                   | III                               |
| Proper shipping name            | Aldehydes, n.o.s.                 |
| Description                     | UN1989, Aldehydes, n.o.s., 3, III |
| Emergency Response Guide Number | 129                               |

### IMDG

|                      |  |
|----------------------|--|
| UN/ID no             | UN1989   |
| Hazard Class         | 3  |
| Packing Group        | III  |
| Proper shipping name | Aldehydes, n.o.s.                              |
| Description          | UN1989, Aldehydes, n.o.s., 3, III, (32°C c.c.) |



Special Provisions 223, 274  
EmS-No F-E, S-D

**IATA**

UN/ID no UN1989  
Hazard Class 3  
Packing Group III  
Proper shipping name Aldehydes, n.o.s.\*  
Description UN1989, Aldehydes, n.o.s.\*, 3, 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) China (IECSC) ENCS (Japan): Philippines (PICCS)

| Chemical Name       | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| 2-Methyl-2-pentenal | 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 No  
Chronic Health Hazard No  
Fire hazard Yes  
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**