

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc. Revision date 16-Jan-2017 Version 1

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

Product identifier

Product Name Product Code 2-Methylpentanal SC-238156

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

Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity (single exposure) Flammable liquids

Label elements Signal word Hazard statements

Symbols/Pictograms

Precautionary Statements - Prevention

Category 2 Category 2A Category 3 Category 2

Danger Causes skin irritation Causes serious eye irritation May cause respiratory irritation Highly flammable liquid and vapor



Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area 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
	If eye irritation persists: Get medical advice/attention
	If skin irritation occurs: Get medical advice/attention
	IF ON SKIN (or hair): Remove/Take off immediately all
	contaminated clothing. Rinse skin with water/shower
	Wash contaminated clothing before reuse
	IF INHALED: Remove victim to fresh air and keep at rest in a
	position comfortable for breathing
	Call a POISON CENTER or doctor/physician if you feel unwell
	In case of fire: Use CO2, dry chemical, or foam for extinction
Precautionary Statements - Storage	Store in a well-ventilated place. Keep container tightly closed
	Store locked up
Precautionary Statements - Disposal	Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC)

Other Information

NFPA Health hazards Flammability Stability Physical and chemical properties	2 3 0 -	2 1	HMIS	Health hazards Flammability Physical hazards Personal protection	2 3 0 -
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Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula	C6H12O		
Molecular Weight	100.16		
CAS No	123-15-9		

Chemical Name CAS No Weight % Oral LD50 Dermal LD50 Inhalation LC50 2-Methylpentanal 123-15-9 >98 > 3200 mg/kg (Rat) --

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
Unsuitable Extinguishing Media	surrounding environment. None.
Specific hazards arising from the	
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 preca	utions 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, protectiv Personal precautions	e equipment and emergency procedures 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 conta Methods for containment Methods for cleaning up	inment and cleaning up Prevent further leakage or spillage if safe to do so. 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, inc	luding 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 contro	ls
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 Appearance Odor

Property _____

pН Melting point/freezing point Boiling point Flash point Density Evaporation rate Upper flammability limits Lower flammability limit Vapor pressure Vapor density Specific gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Explosive properties Oxidizing properties

liquid No information available No information available

Values

No information available No information available 119 °C 16 °C CC (closed cup) 0.81 g/cm³ No information available No information available No information available No information available 3.46 No information available No information available

10. STABILITY AND REACTIVITY

Reactivity
Chemical stability
Possibility of Hazardous Reactions
Hazardous polymerization
Conditions to avoid
Incompatible materials
Hazardous Decomposition Products

Not applicable Stable under recommended storage conditions. None under normal processing. No information available. Heat, flames and sparks. Strong oxidizing agents. 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) 3200 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
2-Methylpentanal 123-15-9	-	17.8 - 19.8: 96 h Pimephales promelas mg/L LC50	-	-
120-10-0		flow-through		

0% 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.

14. TRANSPORT INFORMATION

DOT	
UN/ID no	UN2367
Hazard Class	3
Packing Group	II
Proper shipping name	.alphaMethylvaleraldehyde
Description	UN2367, .alphaMethylvaleraldehyde, 3, II
Emergency Response Guide Number	130



IMDG UN/ID no Hazard Class Packing Group Proper shipping name Description EmS-No	UN2367 3 II .alphaMethylvaleraldehyde UN2367, .alphaMethylvaleraldehyde, 3, II, (16°C c.c.) F-E, S-D
IATA UN/ID no Hazard Class Packing Group Proper shipping name Description	UN2367 3 II .alphaMethylvaleraldehyde UN2367, .alphaMethylvaleraldehyde, 3, II

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-Methylpentanal	Х	Х	-	Х	-	Х	Х	-	Х	Х

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			
Fire hazard	Yes		
Sudden release of pressure hazard			
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
2-Methylpentanal	Х	X	Х
123-15-9			



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