

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc. Revision date 13-Sep-2018 Version 1.2

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

Product identifier

Product Name Product Code Nonanal SC-257926

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

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

Label elements Signal word Hazard statements

Symbols/Pictograms

Precautionary Statements - Prevention

Precautionary Statements - Response

Category 2A Category 3 Category 4

Warning Causes serious eye irritation May cause respiratory irritation. May cause drowsiness or dizziness Combustible liquid



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 cool 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 rinsina If eye irritation persists: Get medical advice/attention 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

Precautionary Statements - Disposal

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC)

Other Information

Other hazards

NFPA

Store in a well-ventilated place. Keep container tightly closed Store locked up Dispose of contents/container to an approved waste disposal plant

Not applicable

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.



3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No	124-19-6
Molecular Weight	142.24
Formula	C9H18O

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Nonanal	124-19-6	>98	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	0.6 - 3.8 mg/L (Rat)4 h

4. FIRST AID MEASURES

First Aid Measures	
General advice	If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye
	wide open while rinsing.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Remove to fresh air If symptoms persist, call a physician Artificial respiration and/or oxygen may be necessary Call a physician Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors Move to fresh air in case of accidental inhalation of vapors or decomposition products
Ingestion	Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required.
	offects both couts and delayed

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 Unsuitable Extinguishing Media Use. Dry chemical. Carbon dioxide (CO2). Water spray (fog). Alcohol resistant foam. No information available.

Specific hazards arising from the chemical

Specific hazards arising from the Keep product and empty container away from heat and sources of ignition. Risk of ignition. Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact No info Sensitivity to Static Discharge No info

No information available. 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 (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective Personal precautions	ve equipment and emergency procedures Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges.
Environmental precautions Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. 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. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling Advice on safe handling	Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).		
Conditions for safe storage, including any incompatibilities			
Storage Conditions	Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep away from heat. 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 control	S
Engineering Controls	Showers
	Eyewash stations
	Ventilation systems
Individual protection measures,	such as personal protective equipment
Eye/face protection	Tight sealing safety goggles. Face protection shield.
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. Wash contaminated clothing before reuse. 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 Liquid 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 93 °C 64 °C CC (closed cup) 0.83 a/mL No information available No information available No information available 0.26 mmHg No information available No information available No information available No information available 3.4 No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical stability Possibility of Hazardous Reactions Hazardous polymerization Stable under recommended storage conditions. None under normal processing. No information available.



Conditions to avoid	H
Incompatible materials	S
Hazardous Decomposition Products	С

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 Avoid repeated exposure.

Numerical measures of toxicity- Product InformationUnknown acute toxicityNo information availableThe following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)5000 mg/kgATEmix (dermal)5000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic life with long lasting effects

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 Other Information	Do not reuse container. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

DOT	Not regulated
IMDG	Not regulated

ΙΑΤΑ

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/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
Nonanal	Х	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	Yes
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