SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.
Revision date 02-Nov-2023
Version 1.4

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

Product identifier

Product Name	Ethyl pyruvate
Product Code	SC-257508

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

Flammable liquids***	Category 3***

Label elements

Signal word	Warning***
Hazard statements	*** Flammable liquid and vapor***

Symbols/Pictograms

Precautionary Statements - Prevention	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 Wear protective gloves/protective clothing/eye protection/face protection***
Precautionary Statements - Response	IF exposed or concerned: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower*** In case of fire: Use CO2, dry chemical, or foam for extinction***
Precautionary Statements - Storage	Store in a well-ventilated place. Keep cool***
Precautionary Statements - Disposal	Dispose of contents/container to an approved waste disposal plant***

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC)	Not applicable

Other Information

NFPA		**HMIS**	
Health hazards	0	Health hazards	0
Flammability	2***	Flammability	2***
Stability	0	Physical hazards	0
Physical and chemical properties	-	Personal protection	-

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 617-35-6
Molecular Weight 116.12
Formula $C_5H_8O_3$

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl pyruvate	617-35-6	>98	-	-	-

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). 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. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. 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***

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: Remove all sources of ignition. 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: No information available.

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. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.***

Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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

Methods for containment	Prevent further leakage or spillage if safe to do so.***
Methods for cleaning up	Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.***

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. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.***

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. May form explosive peroxides.*** Store at 4 °C.
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. 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. Regular cleaning of equipment, work area and clothing is recommended.***

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid
Appearance	No information available
Odor	Odorless

Property	**Values**
pH	No information available
Melting point/freezing point	-58 °C***
Boiling point	144 °C***
Flash point	46 °C*** CC (closed cup) ***
Liquid Density	1.05 g/mL
Evaporation rate	No information available
Upper flammability limits	10.8%
Lower flammability limit	1.6%
Vapor pressure	3.09 mmHg***
Vapor density	4.0 ***
Specific gravity	1.06
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	-0.47
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	May form explosive peroxides.***
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	Avoid repeated exposure.***

Numerical measures of toxicity - Product Information

Unknown acute toxicity	No information available

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	UN3272***
Hazard Class	3***
Packing Group	III***
	Esters, n.o.s.***
	UN3272, Esters, n.o.s., 3, III***
Emergency Response Guide Number	127***

IMDG	***
UN/ID no	UN3272***
Hazard Class	3***
Packing Group	III***
	Esters, n.o.s.***
	UN3272, Esters, n.o.s. (Ethyl pyruvate), 3, III, (46°C c.c.)***
Special Provisions	223, 274***
EmS-No	F-E, S-D***

IATA	***
UN/ID no	UN3272***
Hazard Class	3***
Packing Group	III***
	Esters, n.o.s.***
	UN3272, Esters, n.o.s. (Ethyl pyruvate), 3, III***
ERG Code	3L***

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
Ethyl pyruvate	X***	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	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