



SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.
Revision date 30-Jun-2018
Version 1

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

Product identifier

Product Name Ethyl trans-2-decenoate

Other means of identification

Product Code SC-255165
UN/ID no UN3082
Synonyms None

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

Classification

Flammable liquids Category 4

Label elements

Signal word Warning
Hazard statements Combustible liquid
Symbols/Pictograms

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Precautionary Statements - Storage
Precautionary Statements - Disposal

Store in a well-ventilated place
Dispose of contents/container to an approved waste disposal plant

Other Information

Health hazards not otherwise classified (HHNOC) Not applicable
Physical hazards not otherwise classified (PHNOC) Not applicable

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 7367-88-6
 Molecular Weight 198.30
 Formula C₁₂H₂₂O₂

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ethyl trans-2-decenoate	7367-88-6	100	-	-

4. FIRST AID MEASURES

Description of first aid measures

General advice Consult a physician if necessary. Remove to fresh air.
 Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
 Eye contact Wash with plenty of water.
 Skin contact Wash skin with soap and water.
 Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

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.

Special protective equipment for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits 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 No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid
Appearance	No information available
color	No information available
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	11.61 °C
Boiling point/boiling range	135 °C
Flash point	90.6 °C
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	0.17
Vapor density	6.8
Relative Density	0.88
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	4.58
Autoignition temperature	No information available
Decomposition temperature	No information available

Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
VOC Content (%)	No information available
Liquid Density	0.88 g/mL
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable.
Stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Extremes of temperature and direct sunlight.
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.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
----------	---------------------------

Numerical measures of toxicity

Unknown acute toxicity	100 % of the mixture consists of ingredient(s) of unknown toxicity
	100 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
	100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
	100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
	100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
	100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Carcinogenicity	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	May cause long lasting harmful effects to aquatic life.
-------------	---

Persistence and degradability No information available.
 Bioaccumulation No information available.

Mobility No information available.
 Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
 Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG

UN/ID no UN3082
 Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
 Hazard Class 9
 Packing Group III
 Special Provisions 16, 99
 Description UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III

IATA

UN/ID no UN3082
 Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
 Hazard Class 9
 Packing Group III
 ERG Code 9L
 Special Provisions A97, A158, A197
 Description UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III

IMDG

UN/ID no UN3082
 Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
 Hazard Class 9
 Packing Group III
 EmS-No F-A, S-F
 Special Provisions 274, 335, 969
 Description UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III, Marine Pollutant
 Environmentally hazardous substance, liquid,
 n.o.s. UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III, Marine Pollutant 2

15. REGULATORY INFORMATION

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable
 The Stockholm Convention on Persistent Organic Pollutants Not applicable
 The Rotterdam Convention Not applicable

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) Philippines (PICCS)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ethyl trans-2-decenoate	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**AICS** - Australian Inventory of Chemical Substances

16. OTHER INFORMATION

NFPA	Health hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Revision date 30-Jun-2018

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