

ALFAAB23416

# **Ethyl undecanoate**

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	十一酸乙酯
Product Description:	Ethyl undecanoate
Cat No. :	<b>B23416</b>
CAS No	627-90-7
Molecular Formula	C13 H26 O2
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 001-703-527-3887
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

Physical	State
Liqui	d

Appearance Colorless Odor sweet

## **Emergency Overview**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### <u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

#### Label Elements

None required

## Physical and Chemical Hazards None identified.

Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the environment due to its volatility. Spillage unlikely to penetrate soil. The product is insoluble and floats on water. The product contains volatile organic compounds (VOC) which will

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evaporate easily from all surfaces.

This product does not contain any known or suspected endocrine disruptors.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Undecanoic acid, ethyl ester	627-90-7	97

## **SECTION 4. FIRST AID MEASURES**

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if irritation persists.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration.

#### Ingestion

Clean mouth with water. Get medical attention.

#### Most important symptoms and effects

No information available.

#### Self-Protection of the First Aider

No special precautions required.

#### Notes to Physician

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **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.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

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#### Methods for Containment and Clean Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray.

#### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

#### Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

#### Exposure Controls

#### Engineering Measures

None under normal use conditions. .

#### Personal protective equipment

Eye Protection

Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection

Glove material Natural rubber Butyl rubber Nitrile rubber Neoprene PVC	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
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#### Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Protective gloves

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

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	Recommended Filter type: Particle filter
Small scale/Laboratory use	Maintain adequate ventilation <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No information available.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Physical State	Colorless Liquid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	sweet No data available No information available -15 °C / 5 °F No data available 105 - 105 °C / 221 - 221 °F > 112 °C / > 233.6 °F No data available Not applicable No data available	@ 4 mmHg <b>Method -</b> No information available Liquid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No information available No information available 0.860 Not applicable Insoluble No information available <b>er)</b> No data available No data available No data available No information available No information available	(Air = 1.0) Liquid
Molecular Formula Molecular Weight	C13 H26 O2 214.35	

## SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	No information available. No information available.
Conditions to Avoid	None known.
Materials to avoid	Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11. TOXICOLOGICAL INFORMATION

## Ethyl undecanoate

Product Information	No acute toxicity information is available for this product
(a) acute toxicity;	
(b) skin corrosion/irritation;	No data available
(c) serious eye damage/irritation;	No data available
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	No data available
	There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	No data available
(h) STOT-single exposure;	No data available
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	No data available
Symptoms / effects,both acute and delayed	No information available
	SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
Persistence and Degradability Persistence	Insoluble in water, Persistence is unlikely, based on information available.
Bioaccumulative Potential	May have some potential to bioaccumulate
Mobility in soil	Spillage unlikely to penetrate soil The product is insoluble and floats on water The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Is not likely mobile in the environment due its low water solubility Will likely be mobile in the environment due to its volatility
Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance

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## SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.				
Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.				
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.				
	SECTION 14. TRANSPORT INFORMATION				
Road and Rail Transport	Not Regulated				
IMDG/IMO	Not regulated				
<u>IATA</u>	Not regulated				
Special Precautions for User	No special precautions required				
	SECTION 15. REGULATORY INFORMATION				

#### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	0	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Undecanoic acid, ethyl ester	-	-	x	Х	211-018-5	Х	-	Х	Х	Х	Х	KE-14082

#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Revision Date Revision Summary Health, Safety and Environmental Department 25-Apr-2024 New emergency telephone response service provider.

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

#### Legend

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CAS - Chemical Abstracts Servi	се
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EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road **OECD** - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor

## Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Substances List

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

### Disclaimer

The information provided in this 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