# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 27-Apr-2024
Version 3

ALFAAA18786

## trans-2-Hexenyl acetate

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

产品说明: 反式-2-己烯-醋酸盐, 98% Product Description: trans-2-Hexenyl acetate

Cat No. : A18786

Synonyms 2-Hexen-1-yl-acetate; 2-Hexenyl acetate; Hex-2-enyl acetate

CAS No 2497-18-9 Molecular Formula C8 H14 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

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Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US:**001-800-424-9300 / **Europe:**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 Appearance Odor

Liquid Clear No information available

**Emergency Overview** 

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

## Classification of the substance or mixture

Flammable liquids.	Category 3
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

## **Label Elements**



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## Signal Word

#### Warning

#### **Hazard Statements**

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

## **Precautionary Statements**

#### Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P271 - Use only outdoors or in a well-ventilated area

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor if you feel unwell

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### **Storage**

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### **Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

#### **Physical and Chemical Hazards**

Flammable liquid. Vapors may cause flash fire or explosion.

#### **Health Hazards**

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

## **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

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

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

Component	CAS No	Weight %		
2-Hexen-1-ol, acetate, (E)-	2497-18-9	98		

## **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.

#### **Skin Contact**

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

#### Inhalation

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

#### Ingestion

Clean mouth with water. Get medical attention.

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#### Most important symptoms and effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### Notes to Physician

Treat symptomatically.

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

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

## Extinguishing media which must not be used for safety reasons

No information available.

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

Combustible material. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **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**

Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

#### 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. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

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. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

#### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Keep container tightly closed in a dry and well-ventilated place.

## Specific Use(s)

Use in laboratories

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

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## **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 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

#### **Exposure Controls**

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

#### Personal protective equipment

**Eve Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

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)

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

**Respiratory Protection** 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

Small scale/Laboratory use Maintain adequate ventilation

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

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

AppearanceClearPhysical StateLiquid

Odor
Odor Threshold
PH
No information available
No data available
No information available
No information available
No data available
No data available
No data available

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explosive air/vapour mixtures possible

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**Boiling Point/Range** 165 - 166 °C / 329 - 330.8 °F

**Flash Point** 58 °C / 136.4 °F Method - No information available

No data available **Evaporation Rate** Not applicable Flammability (solid,gas) Liquid

**Explosion Limits** No data available

**Vapor Pressure** No data available

**Vapor Density** 4.90 (Air = 1.0)0.894

Specific Gravity / Density Not applicable **Bulk Density** Liquid

**Water Solubility** No information available No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** No data available

**Explosive Properties** 

**Oxidizing Properties** No information available

C8 H14 O2 **Molecular Formula Molecular Weight** 142.22

## **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions.

**Hazardous Reactions** No information available. **Hazardous Polymerization** No information available.

**Conditions to Avoid** Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

Materials to avoid Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

## **SECTION 11. TOXICOLOGICAL INFORMATION**

## **Product Information**

(a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation			
2-Hexen-1-ol, acetate, (E)-	LD50 > 5 g/kg (Rat)					

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available No data available Skin

No data available (e) germ cell mutagenicity;

No data available (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

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No data available (g) reproductive toxicity;

Category 3 (h) STOT-single exposure;

Results / Target organs Respiratory system

No data available (i) STOT-repeated exposure;

No information available. **Target Organs** 

(j) aspiration hazard; No data available

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** 

Persistence and Degradability No information available

**Bioaccumulative Potential** No information available

Mobility in soil No information available

**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

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with

local regulations.

## **SECTION 14. TRANSPORT INFORMATION**

**Road and Rail Transport** 

**UN-No** UN1993

**Proper Shipping Name** Flammable liquid, n.o.s.

**Hazard Class** 3 Ш **Packing Group** 

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#### IMDG/IMO

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

<u>IATA</u>

**UN-No** UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.\*

Hazard Class 3
Packing Group III

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	List of	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	<b>ENCS</b>	ISHL	AICS	KECL
	Inventory of Hazardous Chemicals (2015 Edition)	•										
2-Hexen-1-ol, acetate,	-	-	X	X	219-680-7	Х	Х	Х	Х	Х	X	KE-19878
(E)-						1						

## **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 27-Apr-2024

**Revision Summary** New emergency telephone response service provider.

## **Training Advice**

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

## Legend

CAS - Chemical Abstracts Service TSCA - United States Toxic Substances Control Act Section 8(b)

Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic

Substances/EU List of Notified Chemical Substances Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances NZIoC - New Zealand Inventory of Chemicals

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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

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)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## **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**