

ALFAAL09401

# **1-Tetradecanethiol**

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

产品说明:	正十四烷基硫醇
Product Description:	1-Tetradecanethiol
Cat No. :	<b>L09401</b>
CAS No	2079-95-0
Molecular Formula	C14 H30 S
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 Unpleasant

# **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. Spillage unlikely to penetrate soil. The product is insoluble and floats on water. The product evaporates slowly.

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

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

Component	CAS No	Weight %
1-Tetradecanethiol	2079-95-0	<=100

## **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 plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

No special precautions required.

### Notes to Physician

Treat symptomatically.

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

## Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

# 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. Use personal protective equipment as required.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

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Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

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

### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

#### Storage

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**

#### 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

### 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 Protective gloves

<b>Glove material</b> Nitrile rubber Neoprene Natural rubber	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
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	Long sleeved clothing
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 <b>Recommended Filter type:</b> Particle filter
Small scale/Laboratory use	Maintain adequate ventilation <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

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**Hygiene Measures** 

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

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

Appearance Colorless **Physical State** Liquid Odor **Odor Threshold** pН Melting Point/Range Softening Point **Boiling Point/Range** Flash Point **Evaporation Rate** Flammability (solid,gas) **Explosion Limits** Vapor Pressure Vapor Density Specific Gravity / Density **Bulk Density** Water Solubility

Partition Coefficient (n-octanol/water)

Unpleasant No data available No information available  $6 - 7 \ ^{\circ}C / 42.8 - 44.6 \ ^{\circ}F$ No data available  $176 - 180 \ ^{\circ}C / 348.8 - 356 \ ^{\circ}F$ > 110 \ ^{\circ}C / > 230 \ ^{\circ}F No data available 0.85 g/cm3

No information available.

No data available No data available 0.85 g/cm3 Not applicable Immiscible No information available r) No data available No data available No data available No data available No information available

No information available

C14 H30 S

230.46

Method - No information available

Liquid

(Air = 1.0) @ 20 °C Liquid

Molecular Formula Molecular Weight

**Explosive Properties** 

**Oxidizing Properties** 

Viscosity

Solubility in other solvents

**Autoignition Temperature** 

**Decomposition Temperature** 

# SECTION 10. STABILITY AND REACTIVITY

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

Hazardous Decomposition Products None under normal use conditions.

# SECTION 11. TOXICOLOGICAL INFORMATION

# **Product Information**

(a) acute toxicity;

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(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	
Persistence and Degradability Persistence	Immiscible with water, May persist, 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 evaporates slowly Is not likely mobile in the environment due its low water solubility Spillage unlikely to penetrate soil
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<br/>ProductsChemical waste generators must determine whether a discarded chemical is classified as a<br/>hazardous waste. Consult local, regional, and national hazardous waste regulations to

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# SAFETY DATA SHEET

1-Tetradecanethiol

	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			
IATA	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)	goods GB		IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
1-Tetradecanethiol	-	-	Х	-	218-209-2	Х	-	Х	Х	Х	-	-

# **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By Revision Date Revision Summary Health, Safety and Environmental Department 01-May-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

	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances <b>IECSC</b> - Chinese Inventory of Existing Chemical Substances	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of 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

**Key literature references and sources for data** https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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

MOVIMDG - 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**