# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ALFAAB23612

## Tin(II) 2-ethylhexanoate

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

产品说明: 2-乙基己酸锡

Product Description: Tin(II) 2-ethylhexanoate

 Cat No.:
 B23612

 CAS No
 301-10-0

 Molecular Formula
 C16 H30 O4 Sn

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

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Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

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 StateAppearanceOdorLiquidNo information availableCharacteristic

Emergency Overview

May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

## Classification of the substance or mixture

Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Reproductive Toxicity	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

#### **Label Elements**



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## Tin(II) 2-ethylhexanoate

#### Signal Word

#### Danger

#### **Hazard Statements**

- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H361 Suspected of damaging fertility or the unborn child
- H411 Toxic to aquatic life with long lasting effects

## **Precautionary Statements**

#### Prevention

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P272 Contaminated work clothing should not be allowed out of the workplace
- P280 Wear protective gloves

#### Response

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P310 - Immediately call a POISON CENTER or doctor

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

#### Storage

P403 - Store in a well-ventilated place

#### **Disposal**

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

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

None identified.

## **Health Hazards**

May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child.

## **Environmental hazards**

Toxic to aquatic life with long lasting effects.

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

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

Component	CAS No	Weight %
Hexanoic acid, 2-ethyl-, tin(2+) salt	301-10-0	<=100

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

#### **General Advice**

If symptoms persist, call a physician.

#### **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. If skin irritation persists, call a physician.

## Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water.

## Most important symptoms and effects

Causes eye burns. May cause allergic skin reaction. Causes severe eye damage. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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## Self-Protection of the First Aider

No special precautions required.

## **Notes to Physician**

Treat symptomatically.

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

## **Suitable Extinguishing Media**

Carbon dioxide (CO 2). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

## 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. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

## Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed 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 ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

#### 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**

Component	China	Taiwan	Thailand	Hong Kong
Hexanoic acid, 2-ethyl-,	-	TWA: 0.1 mg/m <sup>3</sup>		STEL: 0.2 mg/m <sup>3</sup>
tin(2+) salt				_

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	Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
I	Hexanoic acid, 2-ethyl-,	ic acid, 2-ethyl-, TWA: 0.1 mg/m <sup>3</sup> (Vacated) T		IDLH: 25 mg/m <sup>3</sup>	STEL: 0.2 mg/m <sup>3</sup> 15	
-	tin(2+) salt	in(2+) salt STEL: 0.2 mg/m <sup>3</sup>		mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>		
		Skin		-	TWA: 0.1 mg/m <sup>3</sup> 8 hr	
					Skin	

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

#### **Monitoring methods**

MDHS 91 Metals and metalloids in workplace air by X-ray fluorescence spectrometry MDHS 99 Metals in air by ICP-AES

### **Exposure Controls**

#### **Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location. .

## Personal protective equipment

**Eye 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 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

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

Recommended half mask:- 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** Prevent product from entering drains.

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

Appearance

Physical State Liquid

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Method - No information available

Liquid

Liquid

(Air = 1.0) @ 20 °C

## Tin(II) 2-ethylhexanoate

Odor Characteristic
Odor Threshold No data available

pH No information available
Melting Point/Range No data available
Softening Point No data available
No data available

Boiling Point/Range
No information available
> 110 °C / > 230 °F

Evaporation Rate

Flammability (solid,gas)

No data available
Not applicable

Explosion Limits

No data available

Vapor Pressure No data available Vapor Density No data available

Specific Gravity / Density

Bulk Density

Not applicable

1.251 g/cm3

Not applicable

Water Solubility
Solubility in other solvents

No information available
No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature
Decomposition Temperature
Viscosity
Explosive Properties
Oxidizing Properties
No data available
No data available
No information available
No information available

Molecular Formula C16 H30 O4 Sn

Molecular Weight 405.11

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

**Stability** Stable under normal conditions.

Hazardous ReactionsNone under normal processing.Hazardous PolymerizationNo information available.

Conditions to Avoid None known.

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

Oxidizing agent.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## **Product Information**

(a) acute toxicity;

Materials to avoid

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hexanoic acid, 2-ethyl-, tin(2+) salt	LD50 = 5870 mg/kg (Rat)	LD50 > 2000 mg/kg(Rabbit)	

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin Category 1

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May cause sensitization by skin contact

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

Category 2 (g) reproductive toxicity;

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

No information available. **Target Organs** 

No data available (j) aspiration hazard;

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

## **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** May cause long-term adverse effects in the environment. Do not allow material to

> contaminate ground water system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances

which are hazardous for the environment.

Persistence and Degradability Product contains heavy metals. Discharge into the environment must be avoided. Special

pre-treatment is necessary

**Persistence** 

Degradation in sewage

treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

**Bioaccumulative Potential** Product has a high potential to bioconcentrate

May persist.

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.

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

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Do not let this

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chemical enter the environment.

## **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	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Hexanoic acid, 2-ethyl-, tin(2+) salt	Х	-	Х	Х	206-108-6	Х	Х	Х	Х	Х	Х	KE-33854

#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 01-May-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.

#### 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

**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

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

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**RPE** - Respiratory Protective Equipment **LC50** - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

**EC50** - Effective Concentration 50% **POW** - Partition coefficient Octanol:Water **vPvB** - very Persistent, very Bioaccumulative

LD50 - Lethal Dose 50%

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

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from

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**

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## **End of Safety Data Sheet**