

# Section 1 - Identification

**Product Name** Bis(2-ethylhexyl) sebacate

CAS No 122-62-3

**Synonyms** DEHS; Di(2-ethylhexyl)sebacate; Dioctyl sebacate

**Product Code** A16049

**Address** ThermoFisher Scientific Australia Pty Ltd

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**Recommended Use** Laboratory chemicals.

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list. Uses advised against

This product does not contain any substance(s) subject to Prohibition. Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National

Code of Practice for Chemicals of Security Concern.

# Section 2 - Hazard(s) Identification

## Classification under Safe Work Australia

Classified as not hazardous according to criteria of Safe Work Australia.

Physical hazards

No hazards identified

**Health hazards** 

No hazards identified

**Environmental hazards** 

No hazards identified

**Label Elements** None required

Other information

Toxic to terrestrial vertebrates

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# Section 3 - Composition and Information on Ingredients

| Component                              | CAS No   | Weight % |  |  |
|--|----------|----------|--|--|
| Decanoic acid, bis(2-ethylhexyl) ester | 122-62-3 | > 95     |  |  |

## Section 4 - First Aid Measures

**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.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Self-Protection of the First Aider** No special precautions required.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

None reasonably foreseeable.

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.

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

No information available.

## **Hazardous Decomposition Products**

Carbon monoxide (CO), Carbon dioxide (CO2).

## **Decomposition Temperature**

300 °C

## Specific Hazards Arising from the Chemical

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

## Special protective equipment and precautions for fire fighters

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

### **Emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required.

## **Environmental Precautions**

Should not be released into the environment.

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### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

Sweep up and shovel into suitable containers for disposal.

### Clean-up methods - large spillage

Not applicable, packaged goods.

### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

## **Precautions for Safe Handling**

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

## Conditions for Safe Storage, Including any Incompatibilities

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

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

# Section 8 - Exposure Controls and Personal Protection

#### **Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

## **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Exposure Controls Engineering Measures

None under normal use conditions.

### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard

AS/NZS 1337 - Eye protectors for Industrial applications)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness |             | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Nitrile rubber | See manufacturers | -               | AS/NZS 2161 | (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

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**Repiratory Protection**Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

@ 1 mmHg

Liquid

Liquid

and maintenance of repiratory protective devices

Recommended Filter type: Particle filter (or AUS/NZ equivalent)

Recommended half mask:- Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 (or AUS/NZ equivalent)

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

**Environmental exposure controls** No information available.

# Section 9 - Physical and Chemical Properties

#### Information on basic physical and chemical properties

AppearanceLight yellowPhysical StateLiquid

Odor Slight

Odor Threshold

pH

No data available

No information available

Melting Point/Range -55 °C / -67 °F Softening Point No data available

Boiling Point/Range 212 °C / 413.6 °F

Flash Point 215 °C / 419 °F Method - No information available

**Evaporation Rate** No data available

Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

Vapor Pressure 0.001 hPa @ 20 °C

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density 0.910

Bulk Density Not applicable
Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Component** log Pow Decanoic acid, bis(2-ethylhexyl) ester 3.74

Autoignition Temperature 400 °C / 752 °F

**Decomposition Temperature** 300 °C

Viscosityca 23 mPa s at 20 °CExplosive PropertiesNo information availableOxidizing PropertiesNo information available

Other information

Molecular Formula C26 H50 O4
Molecular Weight 426.67

# Section 10 - Stability and Reactivity

**Reactivity** None known, based on information available

Stability No information available.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents.

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

**Hazardous Polymerization** No information available.

# Section 11 - Toxicological Information

### Information on Toxicological Effects

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met

(d) respiratory or skin sensitization;

**Respiratory**Skin
Based on available data, the classification criteria are not met
Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(i) aspiration hazard; Based on available data, the classification criteria are not met

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects,both acute and No information available

delayed

# Section 12 - Ecological Information

**Ecotoxicity effects** 

Persistence and Degradability

Persistence

Expected to be biodegradable

May persist, based on information available.

Bioaccumulative Potential Product has a low potential to bioconcentrate May have some potential to bioaccumulate

| Component                              | log Pow   | Bioconcentration factor (BCF)          |
|--|---|--|
| Decanoic acid, bis(2-ethylhexyl) ester | 3.74  | No data available                      |
| Mobility                               | The product is insoluble and floats on water. T | he product evaporates slowly. Spillage |

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unlikely to penetrate soil. 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

**Products** 

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

**Contaminated Packaging** 

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information

Chemical wastes should be disposed through a licensed commercial waste collection

# Section 14 - Transport Information

IMDG/IMO Not regulated

ADG Not regulated

Not regulated IATA

No hazards identified **Environmental hazards** 

**Special Precautions** No special precautions required

**Additional information** None known

# Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

**National Regulations** Australia

See section 8 for national exposure control parameters.

## Standard for the Uniform Scheduling of Medicines and Poisons

No poison schedule number allocated.

## **Australian Industrial Chemicals Introduction Scheme (AICIS)**

| Component  | Australian Industrial<br>Chemicals Introduction<br>Scheme (AICIS) | Additional information |
|--|---|------------------------|
| Decanoic acid, bis(2-ethylhexyl) ester -<br>122-62-3 | Present   | -                      |

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### Australian - Illicit Drug Precursors/Reagents Substance List

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

## **Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

National pollutant inventory Not applicable

## Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

### **International Inventories**

| Component               | AICS | NZIoC | EINECS    | ELINCS | TSCA | DSL | NDSL | PICCS | <b>ENCS</b> | ISHL | IECSC | KECL     |
|-------------------------|------|-------|-----------|--------|------|-----|------|-------|-------------|------|-------|----------|
| Decanoic acid,          | X    | Х     | 204-558-8 | -      | X    | X   | -    | Х     | X           | Х    | Х     | KE-09405 |
| bis(2-ethylhexyl) ester |      |       |           |        |      |     |      |       |             |      |       |          |

Legend: X - Listed. '-' - Not Listed. KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

## International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Basel convention on the control of transboundary movements of hazardous wastes and their dispoal Not applicable.

| Component                                 | CAS No   | OECD HPV | Restriction of<br>Hazardous<br>Substances (RoHS) | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Major Accident<br>Notification | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Safety Report<br>Requirements |
|---|----------|----------|--|---|--|
| Decanoic acid,<br>bis(2-ethylhexyl) ester | 122-62-3 | Listed   | Not applicable                                   | Not applicable  | Not applicable   |

Authorisation/Restrictions according to EU REACH

Not applicable

# Section 16 - Other Information

Legend

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AICS - Australian Inventory of Chemical Substances

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

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Shins

NZS 5433:2012 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit DNEL - Derived No Effect Level

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

**NZIoC** - New Zealand Inventory of Chemicals

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

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

**KECL** - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

**ACGIH** - American Conference of Governmental Industrial Hygienists

Predicted No Effect Concentration (PNEC)

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

ADG Australian Code for the Transport of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

**BCF** - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

## Key literature references and sources for data

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

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

## **Training Advice**

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

Revision Date 18-Nov-2022 Revision Summary Not applicable.

This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).

### **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**

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