

According to the UN GHS revision 8

Creation Date: April 18, 2026

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## 1. IDENTIFICATION

### 1.1 GHS Product identifier

Product name: Bis(2-ethylhexyl) sebacate

Catalog Number: T21159

CAS Number: 122-62-3

### 1.2 Other means of identification

Other names: -

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses:

### 1.4 Supplier's details

Company: Targetmol Chemicals Inc.

Address: 34 Washington Street, Wellesley Hills, Massachusetts 02481 USA

Tel/Fax: (781) 999-4286

### 1.5 Emergency phone number

Emergency phone number: 781-999-4286

Service hours: Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5 hours).

## 2. HAZARD IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not classified.

### 2.2 GHS label elements, including precautionary statements

Pictogram(s): unknown

Signal word: No signal word

Hazard statement(s): none

Precautionary statement(s):

Prevention: none

Response: none

Storage: none

Disposal: none

### 2.3 Other hazards which do not result in classification

no data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number
Bis(2-ethylhexyl) sebacate	-	122-62-3	204-558-8

### 4. FIRST-AID MEASURES

#### 4.1 Description of necessary first-aid measures

##### General advice

no data available

##### If inhaled

Fresh air, rest.

##### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

##### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

##### Following ingestion

Rinse mouth. Give one or two glasses of water to drink.

#### 4.2 Most important symptoms/effects, acute and delayed

Absorption, Distribution and Excretion It is not...absorbed through skin.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Foam, carbon dioxide, dry chemical...

#### 5.2 Specific hazards arising from the chemical

This chemical is probably combustible. (NTP, 1992)

#### 5.3 Special protective actions for fire-fighters

Use foam, powder, carbon dioxide.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear safety spectacles.

#### Skin protection

Protective gloves.

#### Respiratory protection

Use ventilation.

#### Thermal hazards

no data available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Color	no data available
Odour	MILD ODOR
Melting point/freezing point	$\geq -80$ - $\leq -70$ °C. Atm. press.:Ca. 1 013 hPa. Remarks:Pour point.
Boiling point or initial boiling point and boiling range	248 °C. Remarks:Pressure not available.
Flammability	Combustible.
Lower and upper explosion limit/flammability limit	no data available
Flash point	212 °C. Atm. press.:Ca. 1 013 hPa.
Auto-ignition temperature	Remarks:The test item does not self ignite.
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	kinematic viscosity (in mm <sup>2</sup> /s) = $\geq 21$ - $\leq 25$ . Temperature:20°C.;kinematic viscosity (in mm <sup>2</sup> /s) = $\geq 9.5$ - $\leq 13.5$ . Temperature:40°C.
Solubility	DMSO: Soluble, ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
N-octanol-water partition coefficient	log Pow = 10.08. Remarks:Temperature and pH not available.

Vapour pressure	0 Pa. Temperature:37 °C.
Density and/or relative density	0.914 g/cm <sup>3</sup> at 25°C (lit.)
Relative vapour density	14.7 (Air= 1)
Particle characteristics	no data available

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

Reacts with oxidants.

#### 10.2 Chemical stability

no data available

#### 10.3 Possibility of hazardous reactions

SLIGHT, WHEN EXPOSED TO HEAT OR FLAME. BIS(2-ETHYLHEXYL) SEBACATE is an ester. Esters react with acids to liberate heat along with alcohols and acids. Strong oxidizing acids may cause a vigorous reaction that is sufficiently exothermic to ignite the reaction products. Heat is also generated by the interaction of esters with caustic solutions. Flammable hydrogen is generated by mixing esters with alkali metals and hydrides. This compound can react with oxidizing materials. It will hydrolyze under acidic or basic conditions. (NTP, 1992)

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

Combustible when exposed to heat or flame; can react with oxidizing materials.

#### 10.6 Hazardous decomposition products

When heated to decomposition it emits acrid and irritating fumes.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Oral: LD50 - rat (male/female) - > 5 000 mL/kg bw. Remarks:Original value in mL/kg as given in the study report.

Inhalation: LC0 - rat - air saturated.

Dermal: LD50 - rabbit - 15 029 mg/kg bw.

#### Skin corrosion/irritation

no data available

#### Serious eye damage/irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

no data available

#### Reproductive toxicity

no data available

#### STOT-single exposure

no data available

#### STOT-repeated exposure

no data available

### Aspiration hazard

No indication can be given about the rate at which a harmful concentration of this substance in the air is reached on evaporation at 20°C.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish: LC50 - *Leuciscus idus* - > 1 000 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - > 1 000 mg/L - 48 h.

Toxicity to algae: EC50 - *Desmodesmus subspicatus* (previous name: *Scenedesmus subspicatus*) - > 1 000 mg/L - 72 h.

Toxicity to microorganisms: NOEC - > 352 mg/L.

### 12.2 Persistence and degradability

Pure fungal and bacterial cultures isolated from degraded plastic films showed little or no growth on branched plasticizers such as bis(2-ethylhexyl) sebacate when used as a sole carbon source(1). This data suggests that branched plasticizers such as bis(2-ethylhexyl) sebacate biodegrade slowly. [(1) Stahl WH, Pessen H; Appl Microbiol 1: 30-35 (1953)] Full text: PMC1056854

### 12.3 Bioaccumulative potential

An estimated BCF of 4 was calculated for bis(2-ethylhexyl) sebacate(SRC), using an estimated log Kow of 10.1(1,SRC) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

### 12.4 Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc for bis(2-ethylhexyl) sebacate can be estimated to be  $5.6 \times 10^5$ (SRC). According to a classification scheme(2), this estimated Koc value suggests that bis(2-ethylhexyl) sebacate is expected to have no mobility in soil(SRC).

### 12.5 Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## 14. TRANSPORT INFORMATION

### 14.1 UN Number

no data available

### 14.2 UN Proper Shipping Name

no data available

### 14.3 Transport hazard class(es)

no data available

### 14.4 Packing group, if applicable

no data available

### 14.5 Environmental hazards

no data available

### 14.6 Special precautions for user

no data available

**14.7 Transport in bulk according to IMO instruments**

no data available

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations specific for the product in question**

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

**16. OTHER INFORMATION****Information on revision****Creation Date** April 18, 2026**Revision Date** April 18, 2026**Abbreviations and acronyms**

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

**References**

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>  
 HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>  
 IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>  
 eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)  
 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>  
 ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>  
 ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>  
 Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>  
 ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Other Information**

Health effects of exposure to the substance have been investigated, but none has been found.

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product. All products are for Research Use Only - Not For Human or Veterinary or Therapeutic Use*