

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 27 Dec 2024

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

1.1. Product name:

Bis(2-ethylhexyl) phthalate

1.1. Catalog No.:

676542

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Reproductive toxicity (Category 1B), H360FD

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram Signal word Danger
Hazard statement(s)
H360FD May damage fertility. May damage the unborn child.
Precautionary statement(s)

P201 Obtain special instructions before use.

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

P308 + P313 IF exposed or concerned: Get medical advice/ Attention Supplemental Hazard Statements

none

Restricted to professional users.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting chemical(s)

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Phthalic acid bis(2-ethylhexyl ester)

'Diocyl' phthalate

DEHP

Formula : C₂₄H₃₈O₄

Molecular weight : 390,56 g/mol

CAS-No. : 117-81-7

EC-No. : 204-211-0

Index-No. : 607-317-00-9

Registration number : 01-2119484611-38-XXXX

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

bis(2-Ethylhexyl) phthalate Included in the Candidate List of Substances of Very High Concern (SVHC)

according to Regulation (EC) No. 1907/2006 (REACH)

CAS-No.

EC-No.

Index-No.

Registration number

117-81-7

204-211-0

607-317-00-9

01-2119484611-38-XXXX

Repr. 1B; H360FD <= 100 %

3.1.1. Formula

C₂₄H₃₈O₄

3.1.2. Molecular Weight (g/mol)

390.56

3.1.3. CAS-No.

117-81-7

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry Hands Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing

point
-50,0 °C

f) Initial boiling point and

boiling range

386 °C - lit.

g) Flash point 207,0 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower

flammability or

Lower explosion limit: 0,3 %(V) explosive limits

k) Vapour pressure 1,6 hPa at 93,0 °C

- l) Vapour density No data available
 - m) Relative density 0,985 g/cm³ at 20 °C
 - n) Water solubility insoluble
 - o) Partition coefficient: noctanol/
water
No data available
 - p) Auto-ignition
temperature
390,0 °C
 - q) Decomposition
temperature
No data available
 - r) Viscosity No data available
 - s) Explosive properties No data available
 - t) Oxidizing properties No data available
- 9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity
No data available
- 10.2 Chemical stability
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions
No data available
- 10.4 Conditions to avoid
No data available
- 10.5 Incompatible materials
Strong oxidizing agents
- 10.6 Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
 - Acute toxicity
 - LD50 Oral - Rat - 30.000 mg/kg
 - LD50 Dermal - Rabbit - 25.000 mg/kg
 - Skin corrosion/irritation
 - Skin - Rabbit
 - Result: Mild skin irritation - 24 h
 - Serious eye damage/eye irritation
 - Eyes - Rabbit
 - Result: Mild eye irritation - 24 h
 - Respiratory or skin sensitisation
 - Maximisation Test (GPMT) - Guinea pig
 - Result: Does not cause skin sensitisation.
 - (OECD Test Guideline 406) Germ cell mutagenicity
 - No data available
 - Carcinogenicity
 - This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
 - IARC: 2B - Group 2B: Possibly carcinogenic to humans (bis(2-Ethylhexyl) phthalate)
 - Reproductive toxicity
 - May cause congenital malformation in the fetus.
 - Presumed human reproductive toxicant
 - May cause reproductive disorders.
 - Specific target organ toxicity - single exposure

No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: T10350000
Effects due to ingestion may include:., Gastrointestinal disturbance
Kidney -

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 0,67 mg/l - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) - > 0,32 mg/l - 96 h

LC50 - Cyprinodon variegatus (sheepshead minnow) - > 0,17 mg/l - 96 h

LC50 - Lepomis macrochirus (Bluegill) - > 0,20 mg/l - 96 h

NOEC - other fish - > 0,3 mg/l - 96 h

Toxicity to daphnia and

other aquatic

invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - > 0,16 mg/l - 48 h

12.2 Persistence and degradability

Biodegradability Result: - Readily biodegradable

(OECD Test Guideline 301)

12.3 Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 100 d

- 0,014 mg/l

Bioconcentration factor (BCF): 113

Remarks: Does not bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -
14.4 Packaging group
ADR/RID: - IMDG: - IATA: -
14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user
No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Authorisations and/or restrictions on use
bis(2-Ethylhexyl) phthalate CAS-No.: 117-81-7
REACH - List of substances subject to authorisation (Annex XIV)
Toxic for reproduction (category 1B)
Sunset Date: 21.02.2015
Exempted (Categories of) Uses: Uses in the immediate packaging of medicinal products covered under Regulation (EC) No 726/2004, Directive 2001/82/EC, and/or Directive 2001/83/EC.
bis(2-Ethylhexyl) phthalate CAS-No.: 117-81-7
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Toxic for reproduction (article 57c)
ED/67/2008
bis(2-Ethylhexyl) phthalate CAS-No.: 117-81-7
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Equivalent level of concern having probable serious effects to the environment (article 57 f)
ED/108/2014
bis(2-Ethylhexyl) phthalate CAS-No.: 117-81-7
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)
Toxic to reproduction: category 1B
Restricted to professional users.
See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction bis(2-Ethylhexyl) phthalate CAS-No.: 117-81-7
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)
Shall not be used in toys
See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

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. For lab use only!