



Bis(2-Ethylhexyl) Adipate
CAS No 103-23-1

MATERIAL SAFETY DATA SHEET
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : **Bis(2-Ethylhexyl) Adipate**

CAS-No. : 103-23-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
Ansari Road Daryaganj
New Delhi-110002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Adipic acid di(2-ethylhexyl) ester
DOA

Formula : C₂₂H₄₂O₄
Molecular weight : 370.57 g/mol
CAS-No. : 103-23-1
EC-No. : 203-090-1

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

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

SECTION 5: Firefighting 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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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.
Storage class (TRGS 510): Combustible liquids not in Storage Class 3

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

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

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 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 | Melting point/range: < -70 °C - lit. |
| f) Initial boiling point and boiling range | 175 °C at 3 hPa - lit. |
| g) Flash point | 196 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | No data available |
| l) Vapour density | No data available |
| m) Relative density | 0.924-0.926 g/cm ³ at 20 °C |
| n) Water solubility | No data available |
| o) Partition coefficient: n-octanol/water | log Pow: 8.94 at 25 °C |

- | | |
|------------------------------|---------------------------|
| p) Auto-ignition temperature | 377 °C
at 1,013.25 hPa |
| 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

SECTION 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

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 24,600 mg/kg(Bis(2-ethylhexyl) adipate)

(OECD Test Guideline 401)

LD50 Oral - Rat - male - 45,000 mg/kg(Bis(2-ethylhexyl) adipate)

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 5.7 mg/l(Bis(2-ethylhexyl) adipate)

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 14,800 mg/kg(Bis(2-ethylhexyl) adipate)

Skin corrosion/irritation

No data available(Bis(2-ethylhexyl) adipate)

Serious eye damage/eye irritation

No data available(Bis(2-ethylhexyl) adipate)

Respiratory or skin sensitisation

No data available(Bis(2-ethylhexyl) adipate)

Germ cell mutagenicity

Ames test(Bis(2-ethylhexyl) adipate)

S. typhimurium

Result: negative

(Bis(2-ethylhexyl) adipate)

Mouse - male

Result: negative

Carcinogenicity

This product is or contains a component that is not classifiable as to its classification.(Bis(2-ethylhexyl) adipate)
(Bis(2-ethylhexyl) adipate)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Bis(2-ethylhexyl) adipate)

Reproductive toxicity

No data available(Bis(2-ethylhexyl) adipate)

Specific target organ toxicity - single exposure

No data available(Bis(2-ethylhexyl) adipate)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Bis(2-ethylhexyl) adipate)

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 200 mg/kg(Bis(2-ethylhexyl) adipate)

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Bis(2-ethylhexyl) adipate)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

static test LC0 - Oncorhynchus mykiss (rainbow trout) - > 0.78 mg/l - 96 h(Bis(2-ethylhexyl) adipate)

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h(Bis(2-ethylhexyl) adipate)
(OECD Test Guideline 202)

Toxicity to algae

static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - > 500 mg/l - 72 h(Bis(2-ethylhexyl) adipate)

Toxicity to bacteria

EC50 - Sludge Treatment - > 350 mg/l - 3 h(Bis(2-ethylhexyl) adipate)

12.2 Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d(Bis(2-ethylhexyl) adipate)
Result: 90 - 100 % - Readily biodegradable
(OECD Test Guideline 301F)

12.3 Bioaccumulative potential

Bioaccumulation

Lepomis macrochirus - 28 d
- 250 µg/l(Bis(2-ethylhexyl) adipate)

Bioconcentration factor (BCF): 27

12.4 Mobility in soil

No data available(Bis(2-ethylhexyl) adipate)

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

