

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name : Bis(2-ethylhexyl)adipate (DOA)
Product Number : B103070
Brand : aladdin
CAS-No. : 103-23-1

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

2.2 GHS Label elements, including precautionary statements

Pictogram : no data available
Signal word : no data available
Hazard statement(s)
Precautionary statement(s)

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: Adipic acid di(2-ethylhexyl) ester; DOA; Di(2-ethylhexyl) Adipate; Dioctyl Adipate; Adipic Acid Dioctyl Ester; Bis(2-ethylhexyl)hexanedioate
Formula	: C ₂₂ H ₄₂ O ₄
Molecular weight	: 370.57
CAS No.	: 103-23-1
EC-NO.	: 203-090-1

Component	Classification	Concentration
Bis(2-ethylhexyl)adipate (DOA)		
	no data available	≥99%

SECTION 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. Move out of dangerous area.

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

no data available

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.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 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 gloves 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

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance

form: liquid color: Colorless

b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-67°C
f) Initial boiling point and boiling range	175 °C (347 °F) at 3 hPa (2 mmHg) - lit.
g) Flash point	no data available
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	0.925 g/cm ³ at 20 °C (68 °F)
n) Water solubility	Slightly soluble in water and soluble in most organic solvents.
o) Partition coefficient: n-octanol/water	8.94 at 25 °C (77 °F)
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - Male and Female ->20000 mg/kg

(OECD Testing Guideline 401)

LC50 inhalation - rat - male and female -4 h ->5.7 mg/l - aerosol

(OECD Testing Guideline 403)

LD50 transdermal rabbit -8410 mg/kg

Note: (RTECS)

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation -24 hours Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation Remarks: (ECHA)

Respiratory or skin sensitisation

May be harmful if inhaled.Causes respiratory tract irritation.

Germ cell mutagenicity

Test type: Ames test Testing System: Salmonella Typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guideline 471 Result: Negative Test type: In vitro mammalian cell gene mutation assay Testing System: Mouse Lymphoma Cells Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 476 Result: Negative Test type: In vitro chromosomal aberration test Testing system: Chinese hamster ovary cells Metabolic activation: with or without metabolic activation effect Result: Negative Remarks: (ECHA) Test type: Micronucleus test Species: Mouse Cell type: Red blood cells (erythrocytes) Route of infection: Intraperitoneal Method: OECD Testing Guidelines 474 Result: Negative

Carcinogenicity

This product is not or does not contain components listed as carcinogens by IARC, ACGIH, EPA, and NTP

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

May be harmful if inhaled.Causes respiratory tract irritation.

Additional Information

Repeated toxicity - rat - male and female - oral -28 days - level with no observed harmful effects -200 mg/kg
To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully studied.
The nature of the hazard cannot be ruled out, but it should not occur if handled correctly
Operate in accordance with good industrial hygiene and safety regulations.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 0.78 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia - 0.66 mg/l - 48 h Toxicity to algae LC50 - Pseudokirchneriella subcapitata - > 0.78 mg/l - 96 h

12.2 Persistence and degradability

Bioaccumulation Lepomis macrochirus - 28 d Bioconcentration factor (BCF): 27

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)		
UN number:no data available	Packing group:no data available	Class:no data available
Proper shipping name:no data available	Reportable Quantity(RQ):no data available	Poison Inhalation Hazard:no data available
Environmental Hazards:no data available		
IMDG		
UN number:no data available	Packing group:no data available	EMS-No:no data available
Proper shipping name:no data available		
IATA		
UN number:no data available	Packing group:no data available	Class:no data available
Proper shipping name:no data available		

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
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