

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2023-10-11

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

1.1 Product identifiers

Product name : Butyl ether
Product Number : B119693
Brand : aladdin
CAS-No. : 142-96-1

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 : 800-424-9300 CHEMTREC®, Outside the USA : 001-703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Flammable liquids (Category 3), H226

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Long-term (chronic) aquatic hazard (Category 3), H412

2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word Warning



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Hazard statement(s)

H226 Flammable liquid and vapor

H315 Causes skin irritation

H319 Causes serious eye irritation
H335 May cause respiratory irritation

H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition

sources. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/.../] equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

P302+P352 IF ON SKIN: wash with plenty of water.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN

with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use ... to extinguish.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an approved waste disposal plant.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : n-Butyl ether Di-n-butyl ether

Formula : C8H180 Molecular weight : 130.23 CAS No. : 142-96-1



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EC-NO. : 205-575-3

Component	Classification	Concentration
Butyl ether		
	Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Aquatic Chronic 3; H226, H315, H319, H335, H412 Concentration limits: >= 10 %: STOT SE 3, H335;	•

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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

Carbon dioxide (CO2) Foam Dry powder

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information



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Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store under inert gas. Air and light sensitive.

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



9.1

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Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(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. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective 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 fullface particle respirator type N100 (US) or type P3 (EN 143) 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

If safety requires, prevent further leakage or overflow. Do not allow the product to enter the sewer.

SECTION 9: Physical and chemical properties

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 -98°C f) Initial boiling point and boiling range 142-143°C

g) Flash point (closed cup) 37 °C 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 0.764

n) Water solubility
o) Partition coefficient: n-octanol/water no data available
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



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t) Oxidizing properties N

no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

10.2 Chemical stability

It is stable under the recommended storage conditions

10.3 Possibility of hazardous reactions

Exothermic reaction with: Oxidizing agents Strong acids Risk of explosion with: nitrogen trichloride

10.4 Conditions to avoid

Forms explosive peroxides on prolonged storage Air Light. Heating.

10.5 Incompatible materials

various plastics

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 7.400 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male - 4 h - 21,6 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male - 7.741 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit Result: Mild skin irritation - 4 h (OECD Test Guideline 404) Remarks: (Regulation (EC) No 1272/2008, Annex VI) Drying-out effect resulting in rough and chapped skin. Dermatitis



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Serious eye damage/eye irritation

Eyes - Rabbit Result: Moderate eye irritation (OECD Test Guideline 405) Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Respiratory or skin sensitisation

Open epicutaneous test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test

Guideline 473 Result: negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

May cause respiratory irritation. Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: EK5425000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

flow-through test LC50 - Pimephales promelas (fathead minnow) -32,3 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

semi-static test EC50 - Daphnia magna (Water flea) - > 18,76 mg/l- 48 h

(OECD Test Guideline 202)

Toxicity to algae



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static test ErC50 - Pseudokirchneriella subcapitata (green algae) - ca.19,1 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria

static test EC50 - activated sludge - > 1.000 mg/l - 30 min

(OECD Test Guideline 209)

Remarks: (above the solubility limit in the test medium)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 5 % - Not readily biodegradable. (OECD Test Guideline 301D)

12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 42 d - 0,2 mg/l(1,1'-Oxybis(butane)) Bioconcentration factor (BCF): 47 - 83 (OECD Test Guideline 305C)

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

Avoid release to the environment.

SECTION 13:

13.1 **Disposal considerations**

Product

Dispose of the remaining and non recyclable solution to a licensed company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1149

Proper shipping name: DIBUTYL

ETHERS

Environmental Hazards: no

IMDG

Packing group: III

Reportable Quantity(RQ): no data

available

Class: 3

Poison Inhalation Hazard: no data

available



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UN number: 1149 Packing group: III EMS-No: no data available

Proper shipping name: DIBUTYL ETHERS

IATA

UN number: 1149 Packing group: III Class: 3

Proper shipping name: DIBUTYL ETHERS

SECTION 15: Regulatory information

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

SECTION 16: Other information

Regulatory Affairs

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