

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-02-09

Print Date: 2024-02-14

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

1.1 Product identifiers

Product name : DL-Malic acid
Product Number : D433328
Brand : aladdin
CAS-No. : 6915-15-7

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Serious eye damage/eye irritation(Category 2A)H319

2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word

Hazard statement(s)

H315 Causes skin irritation

H319 Causes serious eye irritation

Precautionary statement(s)

P264 Wash hands [and ...] thoroughly after handling.

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

P321 Specific treatment (see ... on this label).

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



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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P337+P313 IF eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

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

Additional precautionary phrases are located throughout the safety data sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : DL-Hydroxysuccinic acid ; Hydroxybutanedioic acid ; DL-Apple Acid ; 2-

hydroxybutanedioic acid

Formula : C4H6O5

Molecular weight : 134.09

CAS No. : 6915-15-7

EC-NO. : 230-022-8

Component	Classification	Concentration
DL-Malic acid		
	no data available	for synthesis

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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. 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)

4.3 Indication of any immediate medical attention and special treatment needed



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no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water,Foam,Carbon dioxide (CO2),Dry powder Unsuitable extinguishing media no data available

5.2 Special hazards arising from the substance or mixture

In combustion toxic fumes may form.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Do not attempt to take action without suitable protective clothing. 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 or river. Alert the neighbourhood to the presence of fumes or gas.

6.3 Methods and materials for containment and cleaning up

Mix with sand or vermiculite. Sweep up and shovel. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Wash hands thoroughly after handling. Ensure there is sufficient ventilation of the area. Normal measures for preventive fire protection. For precautions see section 2.2.



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7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Sealed in dry, Room Temperature

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

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 spillage. Do not let the product enter the sewer.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearanceb) Odourc) Odour Thresholdno data availableno data available



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d) pH	no data available	
e) Melting point/freezing point	130-132°C at mmHg	
f) Initial boiling point and boiling range	306.4°C at 760 mmHg	
g) Flash point	no data available	
h) Evaporation rate	no data available	
i) Flammability (solid, gas)	no data available	
j) Upper/lower flammability or		
evalorive limite	no data available	

explosive limits no data available no data available k) Vapour pressure I) Vapour density no data available m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available no data available p) Auto-ignition temperature q) Decomposition temperature no data available no data available r) Viscosity 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

Bases, Oxidizing agents, Reducing agents, Alkali metals

10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide.

SECTION 11: Toxicological information



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11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

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

no data available

Additional Information

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

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



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SECTION 13:

13.1 Disposal considerations

Product

Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazardous waste.

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

available available available

Environmental Hazards: NO

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

Further information

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