

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

SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-25 Print Date: 2025-10-01

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

1.1 Product identifiers

Product name : Maleic acid
Product Number : M108864
Brand : aladdin
CAS-No. : 110-16-7

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)

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Warnin

Hazard statement(s)

H302 Harmful if swallowed H315 Causes skin irritation

H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H335 May cause respiratory irritation

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.



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| P264 | Wash hands [and] thoroughly after handling. | |
|----------------|--|--|
| P270 | Do not eat, drink or smoke when using this product. | |
| P271 | Use only outdoors or in a well-ventilated area. | |
| P272 | Contaminated work clothing should not be allowed out of the workplace. | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | |
| P321 | Specific treatment (see on this label). | |
| P330 | Rinse mouth. | |
| P302+P352 | IF ON SKIN: wash with plenty of water. | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | |
| P305+P351+P338 | 38 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact | |
| | lenses if present and easy to do - continue rinsing. | |
| P333+P313 | IF SKIN irritation or rash occurs: Get medical advice/attention. | |
| P362+P364 | Take off contaminated clothing and wash it before reuse. | |
| P405 | Store locked up. | |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. | |
| P501 | Dispose of contents/container to an approved waste disposal plant. | |
| P264+P265 | Wash hands [and] thoroughly after handling. Do not touch eyes. | |
| P301+P317 | IF SWALLOWED: Get medical help. | |
| P337+P317 | If eye irritation persists: Get medical help. | |
| | | |

If skin irritation occurs: Get medical help.

Get medical help if you feel unwell.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

P319

P332+P317

Synonyms : cis-Butenedioic acid;cis-2-Butenedioic Acid Toxilic acid

Formula : C4H4O4

Molecular weight : 116.07

CAS No. : 110-16-7

EC-NO. : 203-742-5

| Component | Classification | Concentration |
|-------------|-------------------|---------------|
| Maleic acid | | |
| | no data available | ≥99%(HPLC) |

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.



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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

Flush eyes with water as a precaution.

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

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

Water, Foam, Carbon dioxide (CO2), Dry powder

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, nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting 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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in



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container for disposal according to local regulations (see section 13).

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 inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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.

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 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

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 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



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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: Clear, canary yellow

b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point no data available

f) Initial boiling point and boiling range 118 - 119 °C (244 - 246 °F) at 975 hPa (731 mmHg) - lit

g) Flash point 32 °C (90 °F) - 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 $0.956 \,\mathrm{g/mL}$ at $25\,^{\circ}\mathrm{C}$ (77 °F)

n) Water solubility It is soluble in water, ethanol, acetone, and slightly soluble in benzene.

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 t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapours may form explosive mixture with air.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid



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Heat, flames and sparks.

10.5 Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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 component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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. May cause respiratory tract irritation.

Additional Information

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available



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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

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: 1993 Packing group: III Class: 3

Proper shipping name: no data available Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available

Environmental Hazards: No

IMDG

UN number: 1993 Packing group: III EMS-No: no data available

Proper shipping name: no data available

IATA

UN number: 1993 Packing group: III Class: 3

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



Shanghai Aladdin Biochemical Technology Co., Ltd. No. 809, Chuhua Branch Road, Fengxian District, Shanghai

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