

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

SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-10 Print Date: 2025-09-12

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

1.1 Product identifiers

Product name : (-)-Menthyl Chloroformate

Product Number : M131981
Brand : aladdin
CAS-No. : 14602-86-9

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 Danger

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 : (-)-Menthyl chloroformate; (1R)-(-)-Menthyl chloroformate; Chloroformic

 $acid \ (1R)-menthyl \ ester \ ; \ L-Menthyl \ chloroformate \ ; \ (-)-Chloroformyloxy-p-menthane \ ;$



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Formula : C11H19ClO2

Molecular weight : 218.72

CAS No. : 14602-86-9

EC-NO. : no data available

| Component | Classification | Concentration |
|---------------------------|-------------------|---------------|
| (-)-Menthyl Chloroformate | | |
| | no data available | ≥95% |

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

If inhaled, please move the patient to fresh air. If breathing stops, give artificial respiration.

In case of skin contact

Immediately remove contaminated clothing and shoes. Rinse with soap and plenty of water. Immediately transport the patient to the hospital. Consult a doctor.

In case of eye contact

Thoroughly rinse with plenty of water for at least 15 minutes and consult a doctor.

If swallowed

Do not induce vomiting. Do not feed anything to unconscious individuals. Rinse your mouth with water. Consult a doctor

4.2 Most important symptoms and effects, both acute and delayed

This substance causes significant damage to mucosal tissue, upper respiratory tract, eyes, and skin, resulting in coughing, shortness of breath, headache, and nausea

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

Carbon oxides, hydrogen chloride gas

5.3 Advice for firefighters



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If necessary, wear a self-contained breathing apparatus to put out the fire.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear a breathing mask. Avoid inhaling vapors, aerosols, or gases. Ensure sufficient ventilation. Eliminate all sources of ignition. 将 Evacuate personnel to a safe area. Pay attention to the accumulation of steam at explosive concentrations, as it can accumulate in low lying areas on the ground.

6.2 Environmental precautions

If safety can be ensured, measures can be taken to prevent further leakage or overflow. Do not allow the product to enter the sewer.

6.3 Methods and materials for containment and cleaning up

Contain spillage and collect spillage with a vacuum cleaner or damp brush, place in container, and dispose of in accordance with 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 the formation of dust and aerosols. Provide suitable exhaust equipment in areas with dust generation.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place. The opened container must be carefully resealed and kept in an upright position to prevent leakage. Suggested storage temperature: 2-8°CC are must be taken when handling and opening containers. Sensitive to humidity

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



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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

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance | no data available |
|--|-------------------|
| 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 | no data available |
| 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 no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available



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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

acid,alcohols,alkali,amine

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

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

There are no components in this product at levels greater than or equal to 0.1% that have been identified by IARC as possible or definite human carcinogens.



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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

Inhalation can cause poisoning. This substance has strong destructive power on tissues, mucous membranes, and upper respiratory tract

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

Toxic to aquatic organisms and has long-lasting effects. Avoid release into the environment.

SECTION 13:

13.1 Disposal considerations

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.



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SECTION 14: Transport information

DOT (US)

UN number: no data available Packing group: no data available Class: no data available

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

CHLOROFORMATES, TOXIC, available available available

CORROSIVE, N.O.S. ((1R)-(-)-Menthyl

chloroformate)

Environmental Hazards: No

IMDG

UN number: no data available Packing group: no data available EMS-No: no data available Proper shipping name: CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S. ((1R)-(-)-Menthyl chloroformate)

IATA

UN number: no data available Packing group: no data available Class: no data available Proper shipping name: CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S. ((1R)-(-)-Menthyl chloroformate)

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

Further information

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