

ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1
Revision Date: 2025-09-12
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Methyllithium solution
Product Number : M110156
Brand : aladdin
CAS-No. : 917-54-4

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)

Flammable liquids Category 2 Category 1

Substances/mixtures that release flammable gases in contact with water Category 1

Self igniting liquid category 1

Acute oral toxicity category 4

Skin corrosion/irritation category 1B

Severe eye injury/eye irritation category 1

Specific target organ toxicity - (single exposure category 3

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s)	
H224	Extremely flammable liquid and vapor
H225	Highly Flammable liquid and vapor
H250	Catches fire spontaneously if exposed to air
H260	In contact with water releases flammable gases which may ignite spontaneously
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P222	Do not allow contact with air.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P231+P232	Handle under inert gas/... Protect from moisture.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P302+P334	IF ON SKIN: Immerse in cool water [or wrap in wet bandages].
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.
P422	Store contents under ...
P402+P404	Store in a dry place. Store in a closed container.
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

3.2 Mixtures

Synonyms	: Lithium methanide; MeLi
Formula	: CH ₃ Li
Molecular weight	: 21.98

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Component	Classification	Concentration
Diethyl ether anhydrous		
CAS-No. : 60-29-7 EC-No. :	Flammable liquid (Class 1), H224 Acute Toxicity, Oral (Category 4), H302 Specific target organ systemic toxicity (single exposure) (Category 3), anesthetic effect, H336	
Methylithium solution		
CAS-No. : 917-54-4 EC-No. :	自燃液体 类别 1; 遇水放出易燃气体的物质和混合物 类别 1; 皮肤腐蚀/刺激 类别 1B; 严重眼睛损伤/眼睛刺激性 类别 1; H250, H260, H314, H318	

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. 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

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

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, Lithium oxides

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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 vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. 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 container for disposal according to local regulations (see section 13). Do not flush with water.

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/protective masks. Strictly prevent entry into the eyes, contact with skin or clothing. Only use in chemical exhaust hoods. Do not breathe smoke/steam/spray. Do not ingest. If swallowed by mistake, immediately contact a doctor. Do not come into contact with water. If there is suspicion of peroxide formation, do not open or move the container. Stay away from open flames, hot surfaces, and ignition sources. Use without generating fire. Use non-sparking tools and explosion-proof equipment. Only tools that do not generate sparks can be used. To prevent steam ignition caused by static discharge, all metal components on the equipment must be grounded. Regarding static electricity, take preventive measures.

7.2 Conditions for safe storage, including any incompatibilities

Suggest storage temperature and refer to the product label.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

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

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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 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 to Slightly Hazy Colorless
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	-15 °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	no data available

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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
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

Stable under recommended storage conditions.

10.2 Chemical stability

Vapours may form explosive mixture with air. Reacts violently with water.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Exposure to humid air or water Stay away from open flames, hot surfaces, and ignition sources

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

methane

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50, oral 1215 mg/kg (Rat)

LD50, skin 20 mL/kg (Rabbit)

Respiratory median lethal concentration 32000 ppm (Rat) for 4 hours

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

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no data available

Germ cell mutagenicity

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.

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

Inhaling high concentrations of steam may cause symptoms such as headache, dizziness, drowsiness, nausea, and vomiting: the product is a corrosive substance. Prohibition Avoid using gastric lavage or vomiting. The possibility of gastric or esophageal perforation should be investigated Ingestion can cause severe swelling, affecting fragile tissues Causing serious damage and posing a risk of perforation

Aspiration hazard

no data available

Additional Information

SECTION 12: Ecological information

12.1 Toxicity

Freshwater fish LC50:>10000 mg/L, 96h static (Lepomis macrochirus)

LC50:=2560 mg/L, 96h flow through (Piphases promelas)

Water flea EC50=165 mg/L/24h

Bacterial toxin EC50=5600 mg/L for 15 minutes

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

log Pow0.82

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**

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: 3394

Packing group: I

Class: 4.2 (4.3)

Proper shipping name: Organometallic substance, liquid, pyrophoric, water-reactive (Methylithium, Diethyl ether)

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data available

Environmental Hazards: No

IMDG

UN number: 3394

Packing group: I

EMS-No: no data available

Proper shipping name: Organometallic substance, liquid, pyrophoric, water-reactive (Methylithium, Diethyl ether)

IATA

UN number: 3394

Packing group: I

Class: 4.2 (4.3)

Proper shipping name: Organometallic substance, liquid, pyrophoric, water-reactive (Methylithium, Diethyl ether)

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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SDS sections updated v1

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