# SAFETY DATA SHEET

Version: v1 Revision Date: 2024-01-10 Print Date: 2024-01-17

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

# 1.1 Product identifiers

Product name	: Nitromethane
Product Number	: N109662
Brand	: aladdin
CAS-No.	: 75-52-5

# 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 3), H226

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Carcinogenicity (Category 2), H351

Reproductive toxicity (Category 2), H361

# 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word



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

Hazard statement(s)	
H226	Flammable liquid and vapor
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H302+H332	Harmful if swallowed or if inhaled
Precautionary statement(s)	
P201	Obtain special instructions before use.
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources No smoking.
P202	Do not handle until all safety precautions have been read and understood.
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.
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.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P308+P313	IF exposed or concerned: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish.
P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.
P301+P312+P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing.Call a POISON CENTER or doctor. 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

Synonyms	: Nitrocarbol NM
Formula	: CH3NO2
Molecular weight	: 61.04
CAS No.	: 75-52-5
EC-NO.	: no data available

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

Component	Classification Concen	
Nitromethane		
	no data available	>99.0% (GC)

# **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

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

In case of skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

In case of eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

If swallowed

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

# 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) and/or in section 11

# 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 Nitrogen oxides (NOx) Avoid shock and friction. In the event of decomposition: danger of explosion! 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.

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

### 5.4 Further information

no data available

#### SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

# 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or general ventilation facilities. Avoid eye and skin contact and avoid breathing vapor. See Section 8 for personal protective measures. Keep away from fire and heat sources, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. If canning is required, the flow rate should be controlled, and there should be a grounding device to prevent the accumulation of static electricity. Avoid contact with incompatible substances such as oxidizing agents (see section 10 for incompatible substances). When handling, it should be lightly loaded and unloaded to prevent damage to packaging and containers. Empty containers may be harmful residues. Wash hands after use and prohibit eating or drinking in the workplace. Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emer

# 7.2 Conditions for safe storage, including any incompatibilities

Store under inert gas.

# 7.3 Specific end use(s)

no data available

# SECTION 8: Exposure controls/personal protection

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

### 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) 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	-28.55°C
f) Initial boiling point and boiling range	101.2°C
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

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

k) Vapour pressure	no data available
I) Vapour density	no data available
m) Relative density	1.134
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

no data available

# 10.2 Chemical stability

heat-sensitive. The product is chemically stable under standard ambient conditions (room temperature) .

# 10.3 Possibility of hazardous reactions

Exothermic reaction with: Hydrocarbons perchlorates Risk of explosion with: acids anilines strong alkalis phosphoric acid Nitric acid metallic oxides organic halides silver salt aluminium chloride alkali hydroxides Ammonia iodides Halogenated hydrocarbon Chloroform oxyhalogenic compounds Organic Substances Oxidizing agents Acetone powdered aluminium formic acid ammonium hydroxide Bases calcium hypochlorite Sodium hydroxide lithium aluminium hydride sodium carbonate hydrides nitrous acid conc. sulfuric acid Potassium hydroxide Calcium hydroxide Morpholine Exothermic reaction with: Hydrocarbons perchlorates Risk of explosion with: acids anilines strong alkalis phosphoric acid Nitric acid metallic oxides organic halides silver salt aluminium chloride alkali hydroxides Ammonia iodides Halogenated hydrocarbon Chloroform oxyhalogenic compounds Organic Substances Oxidizing agents Acetone powdered aluminium formic acid ammonium hydroxide Bases calcium hypochlorite Sodium carbonate hydrocarbon Chloroform oxyhalogenic compounds Organic Substances Oxidizing agents Acetone powdered aluminium formic acid ammonium hydroxide Bases calcium hypochlorite Sodium hydroxide lithium aluminium hydride sodium carbonate hydrides nitrous acid conc. sulfuric acid Potassium hydroxide Norpholine

#### 10.4 Conditions to avoid

Elevated temperatures. Heating.

# 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

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

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

### SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity LD50 Oral - Rat - male and female - 1,478 mg/kg

Remarks: (ECHA)

Symptoms: Nausea, Vomiting, Diarrhea

LC50 Inhalation - Rabbit - 4 h - 14.34 mg/l - vapor

Remarks: (ECHA)

Symptoms: Irritation symptoms in the respiratory tract.

LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

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 Suspected of causing cancer. Reproductive toxicity Suspected of damaging the unborn child. 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 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

12.1 Toxicity

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

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - > 659.2 mg/l - 96 h (APHA 231)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 103 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 102 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - activated sludge - 310 mg/l - 30 min (OECD Test Guideline 209) Remarks: The value is given in analogy to the following substances: 1-nitropropane

#### 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

Discharge into the environment must be avoided.

#### 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.

#### **SECTION 14: Transport information**

DOT (US)		
UN number: 1261	Packing group: II	Class: 3
Proper shipping name:	Reportable Quantity(RQ): no data	Poison Inhalation Hazard: no data
NITROMETHANE	available	available
Environmental Hazards: no data available		

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

IMDG		
UN number: 1261	Packing group: II	EMS-No: no data available
Proper shipping name: NITR	OMETHANE	
ΙΑΤΑ		
UN number: 1261	Packing group: II	Class: 3
Proper shipping name: NITR	OMETHANE	

# 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
Creation Date	09-Oct-2023
Revision Date	10-Jan-2024
Print Date	17-Jan-2024
Revision Summary	SDS sections updated v1

#### Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.