

14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v1

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

### 1.1 Product identifiers

Product name : 2-Methoxyethyl ether

Product Number : M104418
Brand : aladdin
CAS-No. : 111-96-6

## 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 liquid (Class 3), H226

Reproductive toxicity (Category 1B), H360

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Hazard statement(s)

H226 Flammable liquid and vapor

H360 May damage fertility or the unborn child

Precautionary statement(s)

P201 Obtain special instructions before use.



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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.

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+P233 Store in a well-ventilated place. Keep container tightly closed.

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

#### 3.1 Substances

Synonyms : 'Diglyme' Diethyleneglycol dimethyl ether Bis(2-methoxyethyl) ether

Dimethyldiglycol

Formula : C6H14O3

Molecular weight : 134.17

CAS No. : 111-96-6

EC-NO. : 203-924-4

Component	Classification	Concentration
2-Methoxyethyl ether		
	no data available	anhydrous, ≥99.5%

### **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



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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

Use dry chemical, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media

no data available

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides Flammable Vapor is heavier than air, so it can diffuse along the ground. Forming explosive mixtures with air at high temperatures When a fire occurs, it may cause the production of hazardous gases or vapors

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 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



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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

Room temperature storage, sensitive to humidity and air, argon filled storage

## 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



9.1

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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**

## 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 -68°C f) Initial boiling point and boiling range 162°C g) Flash point 50°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 0.95

n) Water solubility
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



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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

Heating moisture

### 10.5 Incompatible materials

strong oxidant

# 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

Acute toxicity

LD50 oral rat 5400 mg/kg

Note: Behavioral: Drowsiness (comprehensive vitality inhibition).

Behavioral: motor disorders

Respiratory disorders

(RTECS)

LC50 inhalation - rats - males and females -7 hours ->11 mg/l - vapor

(OECD Testing Guidelines 403)

Skin corrosion/irritation

Skin Rabbit Results: No skin irritation -24 hours (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation (OECD Testing Guidelines 405)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test type: Extraordinary DNA synthesis test Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 482 Result: Negative Test type: Ames test Testing system: Salmonella

Typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines



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471 Result: Negative Test type: Chromosome aberration test Species: Rat Cell type: Bone marrow Route of exposure: inhalation (vapor) Method: OECD Testing Guidelines 475 Result: Negative

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

Registration of toxic effects of chemical substances: KN3339000

To our knowledge, this chemical, physical, and toxic property has not been fully studied.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50- Pimephales promelas -8569 mg/l -96 hours

Remarks: (IUCLID)

Toxicity to Daphnia and other aquatic invertebrates

Semi static test EC50- Daphnia magna (Daphnia magna) -943 mg/l -48 hours

(OECD Testing Guidelines 202)

Semi static toxicity test on algae ErC50- Pseudokirchniella subcapita (green algae) ->10000 mg/l-

72 hours

(OECD Testing Guidelines 201)

Static toxicity test for bacteria EC20- Activated sludge -1067 mg/l -3 hours

(OECD Testing Guidelines 209)

For Daphnia and other aquatic invertebrates

Toxicity of vertebrates (chronic toxicity)

Semi static test NOEC - Daphnia magna (Daphnia magna) -320 mg/l -21 days

(OECD Testing Guidelines 211)

### 12.2 Persistence and degradability

Aerobic - Exposure time 28 days Result: 67% - has inherent biodegradability. (OECD Test Guide 302B)

### 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available



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#### 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** 

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: 3271 Packing group: III Class: 3

Proper shipping name: Ethers, n.o.s. Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

(diethylene glycol dimethyl ether) available available

Environmental Hazards: no

**IMDG** 

UN number: 3271 Packing group: III EMS-No: no data available

Proper shipping name: Ethers, n.o.s. (diethylene glycol dimethyl ether)

IATA

UN number: 3271 Packing group: III Class: 3

Proper shipping name: Ethers, n.o.s. (diethylene glycol dimethyl ether)

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### SECTION 16: Other information

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

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