

ALADDIN SCIENTIFIC CORPORATION

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-Butanone peroxide  
Product Number : B105747  
Brand : aladdin  
CAS-No. : 1338-23-4(Dimethyl phthalate)

### 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

Organic peroxides (Type D), H242

Acute toxicity, Oral (Category 4), H302

Skin corrosion/irritation (Category 1B), H314

Serious eye damage/eye irritation (Category 1), H318

Reproductive toxicity (Category 2), H361

Specific target organ toxicity - single exposure (Category 3), respiratory tract irritation,

Narcotic effects, H335, H336

Short-term (acute) aquatic hazard (Category 2), H401

### 2.2 GHS Label elements, including precautionary statements

## Pictogram



## Signal word

Danger

## Hazard statement(s)

H226	Flammable liquid and vapor
H242	Heating may cause a fire
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H401	Toxic to aquatic life

## 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.
P260	Do not breathe 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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P410	Protect from sunlight.
P420	Store separately.

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P403+P233	Store in a well-ventilated place. Keep container tightly closed.
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+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Synonyms	: 2-hydroperoxy-2-(2-hydroperoxybutan-2-ylperoxy)butane;Methyl ethyl ketone peroxide; Ethyl methyl ketone peroxide(ca. 50% in Dimethyl Phthalate)
Formula	: no data available
Molecular weight	: no data available

Component	Classification	Concentration
<b>2-Butanone peroxide</b>		
CAS-No. : 1338-23-4	Flammable liquid category 4; Organic peroxidation Type B object; Acute toxicity category 4; emergency Sexual toxicity category 5; Skin corrosion/irritation Category 1B; Serious eye damage/eye irritation Irritable category 1; Acute (short-term) water Health hazard category 2; H227, H241, H302, H313, H314, H318, H401	
EC-No. : 215-661-2		
<b>Dimethyl phthalate</b>		
CAS-No. : 131-11-3	Acute (short-term) aquatic hazard category 3; H402	
EC-No. : 205-011-6		

## 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

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**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 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.

**5.4 Further information**

no data available

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**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**

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For disposal see section 13.

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## 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 in a cool, ventilated warehouse. Store at 2-8 °C.

### 7.3 Specific end use(s)

no data available

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## 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

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.

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**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	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	> 80°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	1.12 – 1.15 g/cm <sup>3</sup>
n) Water solubility	Soluble in oxygen-containing organic solvents, insoluble in water
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**

Stable under recommended storage conditions.

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### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames, and sparks. Avoid heating above: 30 ° C Heating

### 10.5 Incompatible materials

Acid, alkali, organic materials, alum/oxide alum, heavy metal salts, amines

### 10.6 Hazardous decomposition products

no data available

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - Male -1017 mg/kg

(OECD Testing Guideline 401)

LC50 inhalation - rats - male and female -4 h -17 mg/l

(OECD Testing Guideline 403)

LD50 transdermal rabbit male and female -4000 mg/kg

(OECD Testing Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit Results: Corrosive -24 hours (Directive 67/548/EEC, Annex V, B.4.)

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive (Directive 67/548/EEC, Appendix V, B.5.)

#### Respiratory or skin sensitisation

In vivo experiment - guinea pig Result: Does not cause skin allergies. (OECD Testing Guideline 406)

#### Germ cell mutagenicity

Test type: Ames test Testing System: Salmonella Typhimurium 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

**SECTION 12: Ecological information****12.1 Toxicity**

Semi static toxicity test on fish LC50- *Poecillia reticulata* -44.2 mg/l -96 h

(OECD Testing Guidelines 203)

For water fleas and other aquatic species without ridges

Toxicity of Vertebrate Animals

Static test EC50- *Daphnia magna* -39 mg/l -48 h

(OECD Testing Guidelines 202)

Static toxicity test on algae EC50- *Pseudokirchneriella subcapitata* -5.6 mg/l -72 h

(OECD Testing Guidelines 201)

Toxicity to bacteria respiratory inhibition EC50- sludge treatment -48 mg/l -30 minutes

(OECD Testing Guideline 209)

**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**

no data available

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**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)**

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UN number: 3105	Packing group: no data available	Class: 5.2
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S))	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: no		

**IMDG**

UN number: 3105	Packing group: no data available	EMS-No: no data available
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S))		

**IATA**

UN number: 3105	Packing group: no data available	Class: 5.2
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S))		

**SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Law on the Prevention and Control of Occupational Diseases

Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : Listed

Other regulations

Please pay attention on the waste treatment should also comply with local regulations requirement.

**SECTION 16: Other information**

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