

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 : Benzoyl peroxide
Product Number : B104632
Brand : aladdin
CAS-No. : 94-36-0

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)

Organic peroxide (type C), h242

Severe eye injury / eye irritation (category 2a), h319

Skin allergy (Category 1), h317

Acute (short-term) aquatic hazard (Category 1), H400

Long term aquatic hazard (Category 1), H410

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s)	
H242	Heating may cause a fire
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H410	Very toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P234	Keep only in original container.
P235	Keep cool.
P240	Ground/bond container and receiving equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see ... on this label).
P302+P352	IF ON SKIN: wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P333+P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403	Store in a well-ventilated place.
P410	Protect from sunlight.
P411	Store at temperatures not exceeding ... °C/...°F.
P420	Store separately.
P501	Dispose of contents/container to an approved waste disposal plant.
P264+P265	Wash hands [and ...] thoroughly after handling. Do not touch eyes.
P337+P317	If eye irritation persists: Get medical help.
P370+P380+P375+P378	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use... to extinguish].

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: BPO; Dibenzoyl Peroxide; Benzoyl peroxide
Formula	: C ₁₄ H ₁₀ O ₄
Molecular weight	: 242.23
CAS No.	: 94-36-0
EC-NO.	: 202-327-6

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Component	Classification	Concentration
Benzoyl peroxide	Classification	Concentration
	no data available	75%, remainder water

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

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

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: Drink immediately (up to 2 cups). If you feel unwell, consult a doctor.

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, foam, water mist, carbon dioxide

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

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

If safety is ensured, measures can be taken to prevent further leakage or spillage. Don't let the product go down the drain.

6.3 Methods and materials for containment and cleaning up

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

storage temp: 2-8°C

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 EN 166(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 it is safe, prevent further leakage or spillage and do not allow the product to enter the sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Crystals, Powder or Granules color: White
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	103-106°C
f) Initial boiling point and boiling range	no data available
g) Flash point	40°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	8.4
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
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

Heat, flames and sparks.

10.4 Conditions to avoid

Alcohols, Metals

10.5 Incompatible materials

Hazardous decomposition products formed under fire conditions.- Carbon oxides

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD0 oral - mice - male and female - > 2000 mg / kg (benzoyl peroxide) (OECD Test Guideline 401) symptoms: oral, pharyngeal, esophageal and digestive tract mucosal irritation

Lc0 inhalation - rat - male - 4 h - 24.3 mg / L (benzoyl peroxide) (OECD Test Guideline 403)

LD50 inhalation - rat - male - 4 h - 24.3 mg / L (benzoyl peroxide) (OECD Test Guideline 403) symptoms: possible damage:, mucosal irritation transdermal: no data

Skin corrosion/irritation

Eyes - rabbit - Mild eye irritation - 24 h

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

Laboratory experiments have shown mutagenic effects.

Germ cell mutagenicity

Not classifiable as to its carcinogenicity to humans (Benzoyl peroxide)

Carcinogenicity

No data

Reproductive toxicity

No data

Specific target organ toxicity - single exposure

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No data

Specific target organ toxicity - repeated exposure

May be harmful if inhaled. Causes respiratory tract irritation.

Aspiration hazard

No data

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**

Semi static toxicity test to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.06 mg / L - 96 h (benzoyl peroxide) (OECD Test Guideline 203)

Static toxicity test for *Daphnia magna* and other aquatic invertebrates EC50 - *Daphnia magna* - 0.11 mg / L - 48 h (benzoyl peroxide) (OECD Test Guideline 202)

Static toxicity test on algae EC50 - *pseudokirchneriella subcapitata* (green algae) - 0.0711 mg / L - 72 h (benzoyl peroxide) (OECD Test Guideline 201) static test NOEC - *pseudokirchneriella subcapitata* (green algae) - 0.02 mg / L - 72 h (benzoyl peroxide) (OECD Test Guideline 201)

Static toxicity test for bacteria EC50 - activated sludge - 35 mg / L - 0.5 h (benzoyl peroxide) (OECD Test Guideline 209)

12.2 Persistence and degradability

Aerobic - exposure time 28 d (benzoyl peroxide) Results: 71% - fast biodegradable. (OECD Test Guideline 301D)

12.3 Bioaccumulative potential

No data

12.4 Mobility in soil

No data

12.5 Results of PBT and vPvB assessment

As the chemical safety assessment was not required / carried out, the PBT / vpvb assessment was not available

12.6 Other adverse effects

No data

SECTION 13:**13.1 Disposal considerations**

Product

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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: 3102

Packing group: II

Class: 5.2 (1)

Proper shipping name: Organic peroxide type B, solid (Dibenzoyl peroxide) (Benzoyl peroxide)

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data available

Environmental Hazards: No

IMDG

UN number: 3102

Packing group: II

EMS-No: no data available

Proper shipping name: Organic peroxide type B, solid (Dibenzoyl peroxide) (Benzoyl peroxide)

IATA

UN number: 3102

Packing group: II

Class: 5.2 (1)

Proper shipping name: Organic peroxide type B, solid (Dibenzoyl peroxide) (Benzoyl peroxide)

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

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SDS sections updated v1

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