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## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name : Benzoyl peroxide  
Product Number : B104630  
Brand : aladdin  
CAS-No. : 94-36-0

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : It is only for scientific research purposes, not for medicine, family standby medicine or other purposes.

#### 1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

#### 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

### 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		

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H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H410	Very toxic to aquatic life with long lasting effects
<b>Precautionary statement(s)</b>	
P220	Keep away from clothing and other combustible materials.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P370+P378	In case of fire: Use ... to extinguish.
P410	Protect from sunlight.
P420	Store separately.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

## 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
Formula	: C14H10O4
Molecular weight	: 242.23
CAS No.	: 94-36-0
EC-NO.	: 202-327-6

Component	Classification	Concentration
<b>Benzoyl peroxide</b>	no data available	Analytical Reagent

### 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

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no data available

**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**

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.

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**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.

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**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

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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

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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 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.

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**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available

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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

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**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

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

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### **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**

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.

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## **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 erc50 - *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**

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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

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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)**

UN number: 3102

Packing group: II

Class: 5.2 (1)

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

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)

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**SECTION 15: Regulatory information**

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

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**SECTION 16: Other information**

**Further information**

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