

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name : tert-Butyl peroxybenzoate (TBPB)
Product Number : B111162
Brand : aladdin
CAS-No. : 614-45-9

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 Category 4
Organic peroxide D-type
Acute inhalation toxicity - vapor category 4
Skin corrosion/irritation category 2
Skin sensitization category 1
Acute aquatic toxicity category 1

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	
H242	Heating may cause a fire
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H412	Harmful 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.
P264	Wash hands [and ...] thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see ... on this label).
P391	Collect spillage.
P302+P352	IF ON SKIN: wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333+P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use ... to extinguish.
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.
P317	Get emergency medical help.
P332+P317	If skin irritation occurs: Get medical help.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: tert-Butyl perbenzoate TBPB
Formula	: C ₁₁ H ₁₄ O ₃
Molecular weight	: 194.23
CAS No.	: 614-45-9
EC-NO.	: 210-382-2

Component	Classification	Concentration
tert-Butyl peroxybenzoate (TBPB)		
	no data available	≥98%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. 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

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Use water spray, alcohol-resistant foam, dry chemical or 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 fire fighting 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

Use personal protective equipment.Avoid breathing vapours, mist or gas.Ensure adequate ventilation.Evacuate personnel to safe areas.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.Avoid inhalation of vapour or mist.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 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 gloves 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.

Body Protection

Complete suit protecting against chemicals, 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 full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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

no data available

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
d) pH	no data available
e) Melting point/freezing point	8°C
f) Initial boiling point and boiling range	75-76 °C
g) Flash point	93°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	1.021
n) Water solubility	Soluble in ether, alcohol, ester, and ketones. 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

Stable under recommended storage conditions.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

Risk of explosion with: Risk of ignition or formation of inflammable gases or vapours with: Heavy metal salts Strong acids alkalines Reducing agents combustible substances Metals Organic Substances

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Lead, rubber, Copper, brass, Polyvinyl chloride, Mild steel

10.6 Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - > 2,000 mg/kg

(OECD Test Guideline 423)

LC50 Inhalation - Rat - male and female - 4 h - 1.01 - 4.9 mg/l - dust/mist

(OECD Test Guideline 436)

LD50 Dermal - Rat - 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

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

Repeated dose toxicity - Rat - male and female - Oral - 90 d - NOAEL (No observed adverse effect level) - 30 mg/kg

Remarks: (ECHA)

Subchronic toxicity

RTECS: SD9450000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish semi-static test LC50 - Danio rerio (zebra fish) - 1.6 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia
and other aquatic
invertebrates

static test EC50 - Daphnia magna (Water flea) - 11 mg/l - 48 h
(OECD Test Guideline 202)

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

Toxicity to bacteria static test EC50 - activated sludge - 43 mg/l - 0.5 h
(OECD Test Guideline 209)

Toxicity to daphnia
and other aquatic
invertebrates(Chronic
toxicity)

semi-static test EC10 - Daphnia magna (Water flea) - 0.49 mg/l - 21d
(OECD Test Guideline 211)

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

SECTION 13:

13.1 Disposal considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 3103

Packing group: II

Class: 5.2

Proper shipping name: Organic peroxide type C, liquid (tert-Butyl peroxybenzoate) (tert-Butyl perbenzoate)

Reportable Quantity(RQ):no data available

Poison Inhalation Hazard:no data available

Environmental Hazards:no data available

IMDG

UN number: 3103

Packing group: II

EMS-No:no data available

Proper shipping name: Organic peroxide type C, liquid (tert-Butyl peroxybenzoate) (tert-Butyl perbenzoate)

IATA

UN number: 3103

Packing group: II

Class: 5.2

Proper shipping name: Organic peroxide type C, liquid (tert-Butyl peroxybenzoate) (tert-Butyl perbenzoate)

SECTION 15: Regulatory information

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

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

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information



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SDS sections updated v1

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