

Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Bis[1-(tert-butylperoxy)-1-methylethyl]benzene

CAS No.: 25155-25-3

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

Identified uses: Laboratory chemicals, Manufacture of substances. For scientific research and development only. Not for use in humans or animals.

1.3 Details of the supplier of the safety data sheet

Brand: MuseChem

1.4 Emergency telephone number

Telephone: +1-862-686-3898

Fax: +1-323-978-5598

E-mail address: info@musechem.com

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Organic peroxides, Type D

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 4

2.2 GHS Label elements, including precautionary statements



Pictogram(s)

Signal word Danger

Hazard statement(s) H242 Heating may cause a fire
H413 May cause long lasting harmful effects to aquatic life

Precautionary statement(s)

Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool. P240 Ground and bond container and receiving equipment. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/... P273 Avoid release to the environment.
Response	P370+P378 In case of fire: Use ... to extinguish.
Storage	P403 Store in a well-ventilated place. P410 Protect from sunlight. P411 Store at temperatures not exceeding ...°C/...°F.

Disposal P420 Store separately.
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name: Bis[1-(tert-butylperoxy)-1-methylethyl]benzene

Common names and synonyms: Bis[1-(tert-butylperoxy)-1-methylethyl]benzene

CAS number: 25155-25-3

4. FIRST AID MEASURES

4.1 Description of first aid measures

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.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

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

Excerpt from ERG Guide 145 [Organic Peroxides (Heat and Contamination Sensitive)]: Fire may produce irritating, corrosive and/or toxic gases. Ingestion or contact (skin, eyes) with substance may cause severe injury or burns. Runoff from fire control or dilution water may cause pollution. (ERG, 2016)

4.3 Indication of any immediate medical attention and special treatment needed, if necessary

Peroxides should be washed promptly from the skin to prevent irritation. In the case of eye contact, the eyes should be flushed immediately with large amounts of water, and medical attention should be obtained. ... Medical attention should also be obtained in case of accidental ingestion. ...

Peroxides, Organic and Inorganic

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

In case of fire, water should be applied by the sprinkler system or by hose from a safe distance,

preferably with a fog nozzle. Foam may be necessary instead if the peroxide is diluted in a low density flammable solvent. Portable extinguishers should not be used except for very small fires. Peroxides threatened by fire should be wetted from a safe distance for cooling. Peroxides, Organic and Inorganic

5.2 Special hazards arising from the chemical

Flash point data for this compound are not available, however, it is probably combustible. (NTP, 1992)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

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

Spills should be cleaned up promptly using non-sparking tools and an inert, moist diluent such as vermiculite or sand. Sweepings may be placed in open containers or polyethylene bags and the area washed with water and detergent. Spilled, contaminated, waste or questionable peroxides should be destroyed. Peroxides, Organic and Inorganic

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

No data available

Biological limit values

No data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flammable resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Physical state	Solid
b) Colour	No data available
c) Odour	No data available
d) Melting point/freezing point	$\geq 37 - \leq 54$ °C.
e) Boiling point or initial boiling point and boiling range	374.8°C at 760 mmHg
f) Flammability	No data available
g) Lower and upper explosion limit / flammability limit	No data available
h) Flash point	>230 °F
i) Auto-ignition temperature	> 430 . Atm. press.: 1 017 hPa.
j) Decomposition temperature	No data available
k) PH	No data available
l) Kinematic viscosity	No data available
m) Solubility	No data available
n) Partition coefficient n-octanol/water	No data available
o) Vapour pressure	No data available
p) Density and/or relative density	0.97
q) Relative vapour density	No data available
r) Particle characteristics	No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Oral: no data available

Inhalation: no data available

Dermal: no data available

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

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

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 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**13.1 Disposal methods****Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning.

Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION**14.1 UN Number**

ADR/RID: UN3106 IMDG: UN3106 IATA: UN3106

14.2 UN Proper Shipping Name

ADR/RID: ORGANIC PEROXIDE TYPE D, SOLID (For reference only, please check.)

IMDG: ORGANIC PEROXIDE TYPE D, SOLID (For reference only, please check.)

IATA: ORGANIC PEROXIDE TYPE D, SOLID (For reference only, please check.)

14.3 Transport hazard class(es)

ADR/RID: 5.2 IMDG: 5.2 IATA: 5.2

14.4 Packing group, if applicable

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: NO IMDG: No IATA: No

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

15. REGULATORY INFORMATION

Chemical name	Common names and synonyms	CAS number	EC number
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Bis[1-(tert-butylperoxy)-1-methylethyl]benzene	Bis[1-(tert-butylperoxy)-1-methylethyl]benzene	25155-25-3	-
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.

16. OTHER INFORMATION

Further information

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