

Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: tert-Butyl peroxy-3,5,5-trimethylhexanoate.**Other means of identification:** /**Recommended use of the chemical and restrictions on use:** /**Supplier's details:****Emergency phone number:** /

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Organic peroxides Types D

Skin Corrosion/irritation Category 1B

Eye Damage/irritation Category 1

Hazardous to the aquatic environment, acute hazard Category 1

GHS Label elements, including precautionary statements:

Symbol:



Signal word: Danger

Hazard statement(s): Heating may cause a fire . Causes severe skin burns and eye damage. Very toxic to aquatic life.

Precautionary statement(s):

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep only in original container. Keep cool. Ground/Bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Do not breathe dust/fume/gas/mist/ vapors / spray. Wash ... thoroughly after handling. Avoid release to the environment.

Response:

In case of fire: FOR SMALL FIRE: Use water spray, foam, CO₂ or dry chemical to extinguish. DO NOT use water jets. FOR LARGE FIRE: Flood fire area with water from a distance. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see below). IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Collect spillage.

Storage:

Store in a well-ventilated place. Protect from sunlight. Store at temperatures not exceeding ...°C/...°F. Store separately.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
tert-Butyl peroxy-3,5,5-trimethylhexanoate	13122-18-4	98.1% Zhenghua Group

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove contaminated clothing and rinse with plenty of running water.

In case of eye contact: Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician.

If ingestion: Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: FOR SMALL FIRE: Water spray, foam, CO₂ or dry chemical. DO NOT use water jets. FOR LARGE FIRE: Flood fire area with water from a distance.

Special hazards arising from the chemical: Will not burn but increases intensity of fire. May explode from friction, shock, heat or containment. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous. Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. May emit irritating, poisonous or corrosive fumes. Combustion/decomposition may produce acrid/toxic fumes of carbon monoxide (CO).

Special protective actions for fire-fighters: Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. Extinguishers should be used only by trained personnel. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Avoid breathing dust or vapours and all contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Environmental precautions: Isolate contaminated areas and restrict access.

Methods and materials for containment and cleaning up: Minor Spills: Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result. Scoop up solid residues and seal in labelled drums for disposal. Major Spills: Contain spill with sand, earth or other clean,

inert materials. NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter. Use spark-free and explosion-proof equipment. Collect any recoverable product into labelled containers for possible recycling. DO NOT mix fresh with recovered material. Collect residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. Decontaminate equipment and launder all protective clothing before storage and re-use.



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Section 7 HANDLING AND STORAGE

Precautions for safe handling: There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear protective masks, normal protective clothing and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

Conditions for safe storage, including any incompatibilities: Store in original containers in an isolated approved flammable materials storage area. Keep containers securely sealed as supplied. **WARNING:** Gradual decomposition during storage in sealed containers may lead to a large pressure build-up and subsequent explosion. No smoking, naked lights, heat or ignition sources. Store in a cool, dry, well ventilated area. Store under cover and away from sunlight. Store below safe storage (control) temperature. Always store below 35 deg.C. Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction. Store away from incompatible materials. Store away from foodstuff containers. DO NOT stack on wooden floors or wooden pallets. Protect containers against physical damage. Check regularly for spills and leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. Keep locked up. Restrictions may apply on quantities and to other materials permitted in the same location.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Appropriate engineering controls: Close strictly and provide sufficient local exhaust.

Individual protection measures

Eye/face protection: Safety glasses with side shields. Chemical goggles.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber.

Respiratory protection: Type A-P Filter of sufficient capacity.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Colorless transparent liquid.
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	/
Initial boiling point and boiling range	/
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/

Vapour pressure	/
Vapour density	/
Relative density	/
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	/



Section 10 STABILITY AND REACTIVITY

Reactivity: /**Chemical stability:** This material is stable in normal temperature.**Possibility of hazardous reactions:** Organic peroxides may decompose explosively, burn rapidly, be impact and/or friction sensitive and react dangerously with many other substances.**Conditions to avoid:** Spark, high temperature and static electricity.**Incompatible materials:** Flammable materials and reducing agents.**Hazardous decomposition products:** Oxycarbides.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.**Symptoms related to the physical, chemical and toxicological characteristics:** /**Acute health effects:** Accidental ingestion of the material may be harmful and cause cough and throat irritation. Oral intake cause bellyache, nausea, vomit and other symptoms. Skin contact with acidic corrosives may result in pain and burns. Direct eye contact with acid corrosives may produce pain, lachrymation, photophobia and burns.**Chronic health effects:** Repeated or prolonged exposure may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.**Numerical measures of toxicity(such as acute toxicity estimates):**

dermal (rat) LD50: >2000 mg/kg

Inhalation (rat) LC50: >0.8 mg/l/4H

Oral (rat) LD50: >5000 mg/kg

Section 12 ECOLOGICAL INFORMATION

Toxicity:

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE
LC50	96	Fish	7.03mg/L
EC50	48	Crustacea	0.518mg/L
EC50	72	Algae or other aquatic plants	0.14mg/L
NOEC	72	Algae or other aquatic plants	0.04mg/L

Persistence and degradability: /**Bioaccumulative potential:** /**Mobility in soil:** /

Other adverse effects: /



Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

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Section 14 TRANSPORT INFORMATION

UN number: 3105.**UN proper shipping name:** ORGANIC PEROXIDE TYPE D, LIQUID.**Transport hazard class(es):** 5.2.**Packing group, if applicable:** /**Environmental hazards:** /**Special precautions for user:** /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GA 57-1993, GB/T 15098-2008, GBZ 2.1-2007, GBZ 2.2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	10-Dec-2019

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.