Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier:Tert-butyl peroxy-2-ethylhexanoate
Other means of identification:/
Recommended use of the chemical and restrictions on use:/
Supplier's details: Zibo Zhenghua Auxiliary Incorporated Company
Emergency phone number:/

Section 2 HAZARDS INDENTIFICATION

Classification of the substance or mixture:
Organic peroxides Type C
Eye Damage/irritation Category 2.
GHS Label elements,including precautionary statements:
Symbol

Signal word:Danger
Hazard statement(s):Heating may cause a fire. Cause serious eye irritation.
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.Keep container tightly closed.Ground/Bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash thoroughly after work.
Response:
In case of fire: use foam, dry powder, carbon dioxide or water spray to extinguish the fire. If it gets into eyes: Rinse cautiously with water for several minutes. If you wear contact lenses and can take them out easily, take out the contact lenses. Continue to rinse. If eye irritation persists: Get medical advice/attention.
Storage:
Store in a well-ventilated place.Keep from sunlight.Store at temperatures not exceeding…℃/…°F.Store separately.
Disposal:
Dispose of contents/container…
Other hazards which do not result in classification:/

Section 3 COMPOSTION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.:	Concentration%
Tert-butyl peroxy-2-ethylhexanoate	3006-82-4	98%

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:

Ingestion of oxidants such as peroxides can cause toxic myocarditis.

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

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Enter the fire from the upwind, spray water to cool the container, and move the container from the fire to the open space if possible. Use water spray, foam, dry powder, carbon dioxide to extinguish the fire

Specific hazards caused by chemicals: Heat, chemical reaction, friction or impact may cause decomposition reaction or spontaneous combustion of the substance. The substance is very sensitive to temperature rise; when the temperature is higher than the controllable temperature, a violent decomposition reaction may occur and it may catch fire. It is forbidden to exceed the controllable temperature to prevent the occurrence of autocatalytic decomposition reactions. Explosive decomposition reactions may occur when heated or put into or in fire. Storage in a small space may cause explosive decomposition reactions. This substance can burn violently; its autocatalytic decomposition reaction will produce a lot of gas. Steam or dust can form explosive mixtures with air. It may reignite after the flame is extinguished.

Special protective actions for fire-fighters: The substance may react violently or explosively. Wear full body protective clothing and respiratory protective equipment. Use various methods to prevent leaks from entering drains or waterways. Consider personnel retreat (or take on-site protection). Never approach containers suspected of being hot. Extinguish the fire from a place where you can protect yourself or use the water pipe bracket or nozzle of the remote control. From a place where you can protect yourself, use plenty of water to cool the container in contact with the fire until the flame is completely extinguished. Under safe conditions, remove the undamaged container from the fire tunnel. Do not move heated goods or vehicles. If the fire is out of control, immediately evacuate all personnel and warn them not to enter.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautios,protective eauipment and emergence procedures: A Clean up all spills immediately. Smoking, exposed lights and ignition sources are prohibited. Avoid contact with any organic matter, including fuel, solvents, sawdust, paper, clothing, or other prohibited substances, which can cause ignition. Prevent inhalation of dust or steam, and avoid any contact of this material with skin and eyes. Use protective equipment to control personnel access.

Environmental precautions: Use any method to prevent leaks from entering the gutter or drain

Methods and material for containment and cleaning up: Small leaks: Use dry sand, soil, inert materials or vermiculite to collect and absorb the leaks. It is strictly forbidden to use sawdust as adsorption material, because it may cause burning. Scoop up solid residues and collect them in closed labeled barrels for disposal. Large spills: Use sand, earth, or other clean inert materials to absorb spills. It is strictly forbidden to use organic absorbents, such as sawdust, paper, or cloth, etc., because it may cause fire. Prevent any contamination by organic matter. Use non-sparking and explosion-proof equipment. Collect recyclable products and labeled containers for disposal. Rinse the contaminated area

to prevent waste fluid from flowing into the gutter. After cleaning, all protective clothing and equipment should be decontaminated and cleaned before storage and reuse.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Prevent personal contact and avoid inhalation of dust, smoke or steam. In all cases, protective equipment must be worn to rinse any spilled material from the clothing. Use this substance in a well-ventilated area to prevent the accumulation of steam. Keep this product away from light, heat, ignition sources, flammable substances or combustible substances. Keep dry and away from contraindications. Keep cool, the temperature should be lower than the specified control temperature. Prevent friction and vibration, and avoid storing in a closed space. Use non-sparking tools. Protect the container from physical damage.

Conditions for safe storage,including any incompatibilities: Commodities are usually stored after dilution. Store in a cool, ventilated warehouse. The storage temperature does not exceed -15℃, and the relative humidity does not exceed 80%. Keep away from fire and heat. It should be stored separately from reducing agents, acids, alkalis, flammables and edible chemicals, and avoid mixed storage. Use explosion-proof lighting and ventilation facilities. It is forbidden to use mechanical equipment and tools that easily generate sparks. The storage area should be equipped with leakage emergency treatment equipment and suitable containment materials. Vibration, impact and friction are prohibited.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:/

Appropriate engineering controls: Generally need to take local ventilation. If there is a risk of overexposure, wear suitable respirator. The respirator must be of appropriate size to fully protect. In special cases, it may be necessary to use an air-supply respirator.

Personal protection measures

Protective goggles/masks: Chemical goggles. A full face mask can be used as an auxiliary protection for the eyes but cannot be the first choice.

Skin protection: Wear chemical protective gloves (such as PVC gloves). Wear safety shoes or safety boots (such as rubber materials).

Respiratory protection: A-P type filter with sufficient capacity

Thermal hazards:/

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance(physical state,colour etc)	Colorless transparent liquid
Odor	/
Odor Threshold	/
PH	/
Melting point/freezing point	-25℃
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	0.89
Solubility(ies)	Insoluble in water

Partition coefficient:n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	/

Section 10 STABILITY AND REACTIVITY

Reactivity:/

Chemical stability: Organic peroxides are a class of highly active dangerous substances. They are unstable due to heat and are prone to heat-resistant, self-catalyzed decomposition reactions. Organic peroxides can decompose explosively, burn rapidly, are sensitive to impact or friction and can react dangerously with many substances.

Possibility of hazardous reactions: Avoid mixing or reacting with acids, alkalis, reducing agents, metal powders, metal oxides, transition metals and their compounds. Organic compounds can catch fire in high concentrations of peroxides. Highly reduced substances such as sulfides, nitrides and hydrides can react explosively with peroxides. Almost all chemical types and peroxides will release a certain amount of heat. The reaction of many peroxides can cause explosions or gas evolution (toxic or non-toxic).

Conditions to avoid: High temperature, sparks, static electricity.

Incompatible materials: Reducing agents, acids, flammables.

Hazardous decomposition products: Carbon monoxide, carbon dioxide.

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: Inhalation of organic peroxide dust or steam can irritate the throat and lungs and cause asthma-like symptoms. Ingestion of organic peroxides can cause nausea, vomiting, abdominal pain, stiffness, cyanosis of the skin and mucous membranes. Myocarditis may also occur. All organic peroxides are irritating to the skin. If they come into contact with the skin, they can cause inflammation, and some types may cause allergic reactions. Eye contact with organic peroxides can cause cloudiness and redness, and long-term exposure can cause eye swelling and burns.

Chronic health effects: Long-term continuous exposure to peroxide can cause allergic skin reactions (reddening of the skin, peeling of the skin) and asthma.

Numerical measures of toxicity(such as acute toxicity estimates):

Oral (half-lethal) (rat) LD 50: > 10000mg/kg

Section 12 ECOLOGICAL INFORMATION

Toxicity:/

Persistence and degradability:

Water/soil: high

Air: high

Bioaccumulative potential: medium(Log KOW=4.3048)

Mobility in soil:Low(KOC=1242)

Other adverse effects:/

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Dispose with safe burying method. Damaged containers are forbidden to be reused, and must be buried in the prescribed place.

Section 14 TRANSPORT INFORMATION

UN number:3113
UN proper shipping name:ORGANIC PEROXIDE TYPE C,LIQUID,TEPERATURE CONTROLED.
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/T16483-2008,GB 13690-2009,GB 18218-2009,GB 15258-2009,GB 6944-2012,GB 190-2009,GB/T 191-2008,GB 12268-2012,GA57-1993,GB/T 15098-2008,GBZ 2.1-2007,GBZ 2,2-2007 as well as the following regulations:Railway Dangerous Goods Transport Administrative Regulation,Dangerous Chemicals Safety Aministrative Regulation.

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	3-Jul,2020

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 does exist for the solid)in the table with"/"logo.