

SAFETY DATA SHEET

2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane 50%

Lanzhou Auxiliary Agent Plant Co., Ltd

SDS

- According to GHS (Sixth Revised Edition)

Section 1 Product and Company Identification

> Product Identifier

| | |
|-------------------|---|
| Product Name | 2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane 50% |
| Synonyms | - |
| CAS No. | - |
| EC No. | - |
| Molecular Formula | - |

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

| | |
|--------------------------|------------------------------|
| Relevant Identified Uses | Please consult manufacturer. |
| Uses Advised Against | Please consult manufacturer. |

> Details of the Supplier of the Safety Data Sheet

| | |
|---------------------|---|
| Applicant Name | Lanzhou Auxiliary Agent Plant Co., Ltd |
| Application Address | No.358 Nanpoping Shajingyi Anning District, Lanzhou City, Gansu Province, China |
| Applicant Post Code | 730079 |
| Applicant Telephone | +86-931-7713668 |
| Applicant Fax | +86-931-7766467 |
| Applicant E-mail | 543908218@qq.com |
| Supplier Name | Lanzhou Auxiliary Agent Plant Co., Ltd |
| Supplier Address | No.358 Nanpoping Shajingyi Anning District, Lanzhou City, Gansu Province, China |
| Supplier Post Code | 730079 |
| Supplier Telephone | +86-931-7713668 |
| Supplier Fax | +86-931-7766467 |
| Supplier E-mail | 543908218@qq.com |

> Emergency Phone Number

| | |
|------------------------|-----------------|
| Emergency Phone Number | +86-931-7766493 |
|------------------------|-----------------|

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the sixth revised edition):

> GHS Hazard Class

| | |
|----------------------------------|-------------|
| Organic Peroxides | Type E |
| Skin Corrosion/Irritation | Category 2 |
| Eye Damage/Irritation | Category 2A |

> GHS Label Elements

Pictogram



Signal Word

Warning**> Hazard Statements**

| | |
|-------------|-------------------------------|
| H242 | Heating may cause a fire |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |

> Precautionary Statements**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. |
| P264 | Wash thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

Response

| | |
|-----------------------|--|
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

Storage

| | |
|-------------|-----------------------------------|
| P403 | Store in a well-ventilated place. |
| P410 | Protect from sunlight. |
| P420 | Store separately. |

Disposal

| | |
|-------------|---|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
|-------------|---|

Section 3 Composition/Information on Ingredients

| Component | Concentration (weight percent, %) | CAS No. | EC No. |
|---|-----------------------------------|----------|-----------|
| 2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane | Commercial secrets | 78-63-7 | 201-128-1 |
| Calcium carbonate | Commercial secrets | 471-34-1 | 207-439-9 |

Section 4 First Aid Measures

> Description of First Aid Measures

| | |
|-----------------------------------|---|
| General Advice | Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance. |
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Skin Contact | Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable. |
| Ingestion | Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. |
| Inhalation | Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately. |
| Protecting of First-aiders | Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination. |

> Most Important Symptoms and Effects, both Acute and Delayed

- 1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing Media
Unsuitable Extinguishing Media

> Specific Hazards Arising from the Substance or Mixture

- 1 Containers may explode when heated.
- 2 Fire exposed containers may vent contents through pressure relief valves.
- 3 May expansion or decompose explosively when heated or involved in fire.

> Advice for Firefighters

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

> Environmental Precautions

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

> Methods and Materials for Containment and Cleaning Up

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage**> Precautions for Handling**

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

> Precautions for Storage

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/ hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

Section 8 Exposure Controls/Personal Protection**> Control Parameters****Occupational Exposure Limit Values**

| Component | Country/Region | Limit Value - Eight Hours | | Limit Value - Short Term | |
|-------------------------------|-----------------|---------------------------|-------------------|--------------------------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Calcium carbonate 471-34-1 | USA - OSHA | - | 15 | - | - |
| | Latvia | - | 6 | - | - |
| | Ireland | - | 10 | - | - |
| | France | - | 10 | - | - |
| | Canada - Québec | - | 10 | - | - |
| | Australia | - | 10 | - | - |

Biological Limit Values

No information available

Monitoring Methods

- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air(Series standard).

> Engineering Controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

> Personal Protection Equipment

| | |
|---------------------------------|--|
| Eye Protection | Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US). |
| Hand Protection | Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard. |
| Respiratory protection | If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges. |
| Skin and Body Protection | Wear fire/flame resistant/retardant clothing and antistatic boots. |

Section 9 Physical and Chemical Properties

| | |
|--|--|
| Appearance: White powder | Odor: No information available |
| Odor Threshold: No information available | pH: No information available |
| Melting Point/Freezing Point (°C): No information available | Initial Boiling Point and Boiling Range (°C): No information available |
| Flash Point (°C)(Closed Cup): Not applicable | Evaporation Rate: Not applicable |
| Flammability: No information available | Upper/lower explosive limits[%(v/v)]: Upper limit : No information available ; Lower limit : No information available |
| Vapor Pressure (MPa): Not applicable | Relative Vapour Density(Air = 1): Not applicable |
| Relative Density(Water=1): No information available | Solubility: No information available |
| n-Octanol/Water Partition Coefficient: No information available | Auto-Ignition Temperature(°C): No information available |
| Decomposition Temperature (°C): No information available | Kinematic Viscosity (mm²/s): Not applicable |
| Particle characteristics: No information available | |

Section 10 Stability and Reactivity

| | |
|---|--|
| Reactivity | Contact with incompatible substances can cause decomposition or other chemical reactions. |
| Chemical Stability | Stable under proper operation and storage conditions. |
| Possibility of Hazardous Reactions | No information available |
| Conditions to Avoid | Incompatible materials, heat, flame and spark. |
| Incompatible Materials | No information available |
| Hazardous Decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11 Toxicological Information

> Acute Toxicity

| Component | CAS No. | LD ₅₀ (Oral) | LD ₅₀ (Dermal) | LC ₅₀ (Inhalation, 4h) |
|---|----------|-------------------------|---------------------------|-----------------------------------|
| Calcium carbonate | 471-34-1 | 6450mg/kg(Rat) | No information available | No information available |
| 2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane | 78-63-7 | > 3200mg/kg(Rat) | No information available | No information available |

> Skin Corrosion/Irritation

Causes skin irritation(Category 2)

> Serious Eye Damage/Irritation

Causes serious eye irritation(Category 2A)

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

| ID | CAS No. | Component | IARC | NTP |
|----|----------|---|------------|------------|
| 1 | 78-63-7 | 2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane | Not Listed | Not Listed |
| 2 | 471-34-1 | Calcium carbonate | Not Listed | Not Listed |

> Reproductive Toxicity

No information available

> Reproductive Toxicity (Additional)

No information available

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

No information available

> Aspiration Hazard

No information available

> Acute Aquatic Toxicity

No information available

> Chronic Aquatic Toxicity

No information available

> Others**Persistence and Degradability**

No information available

Bioaccumulative Potential

No information available

Mobility in Soil

No information available

Results of PBT and vPvB Assessment

2,5-Bis(tert-butyl peroxide)-2,5-dimethylhexane does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.
Calcium carbonate does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Section 13 Disposal Considerations

Waste Chemicals

Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated Packaging Disposal Recommendations

Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. Refer to section 13.1 and 13.2.

Section 14 Transport Information

Transporting Label**Marine pollutant**

None

UN Number

3108

UN Proper Shipping Name

ORGANIC PEROXIDE TYPE E,SOLID

Transport Hazard Class

5.2

Transport Subsidiary Hazard Class

None

Packing Group

Meet the class II packaging requirements

Section 15 Regulatory Information

> International Chemical Inventory

| Component | EINECS | TSCA | DSL | IECSC | NZIoC | PICCS | KECI | AICS | ENCS |
|--------------------------------------|--------|------|-----|-------|-------|-------|------|------|------|
| 2,5-Bis(tert-butyl peroxide)-2,5-dim | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|
| ethylhexane | | | | | | | | | |
| Calcium carbonate | √ | √ | √ | √ | √ | √ | √ | √ | √ |

【EINECS】 European Inventory of Existing Commercial Chemical Substances.

【TSCA】 United States Toxic Substances Control Act Inventory.

【DSL】 Canadian Domestic Substances List.

【IECSC】 China Inventory of Existing Chemical Substances.

【NZIoC】 New Zealand Inventory of Chemicals.

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances.

【KECI】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Creation Date 2017/12/21

Revision Date 2017/12/21

Reason for Revision -

> Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 6th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.