Effective Date: 2017/12/21 DG1723371E

SAFETY DATA SHEET

1,1-bis(tert-buty peroxy)-3,3,5-trimethylcyclohexane 90%



Lanzhou Auxiliary Agent Plant Co., Ltd

According to GHS (Sixth Revised Edition)

Section 1 **Product and Company Identification**

> Product Identifier

Product Name 1,1-bis(tert-buty peroxy)-3,3,5-trimethylcyclohexane 90%

Synonyms

CAS No. 6731-36-8 EC No. 229-782-3 Molecular Formula C17H34O4

> 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

No.358 Nanpoping Shajingyi Anning District, Lanzhou City, Gansu Province, **Application Address**

China

Applicant Post Code 730079

+86-931-7713668 **Applicant Telephone** +86-931-7766467 **Applicant Fax** Applicant E-mail 543908218@qq.com

Supplier Name Lanzhou Auxiliary Agent Plant Co., Ltd

No.358 Nanpoping Shajingyi Anning District, Lanzhou City, Gansu Province, **Supplier Address**

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

+86-931-7766493 Number

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 B

Specific Target Organ

Toxicity (Repeated Category 2

Exposure)

Hazardous To The

Aquatic EnvironmentShort-Term (Acute)

Category 1

Hazard

Hazardous To The

Aquatic Environment

Long-Term(Chronic) Hazard

Category 1

> GHS Label Elements

Pictogram

Signal Word Danger

> Hazard Statements

H241 Heating may cause a fire or explosion

H373 May cause damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

> 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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

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. |
|---|-----------------------------------|-----------|-----------|
| 1,1-bis(tert-buty peroxy)-3,3,5-trimethylcycl ohexane | Commercial secrets | 6731-36-8 | 229-782-3 |

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

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

- 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

- Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 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

No information available

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

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US). **Eye Protection**

Wear protective gloves (such as butyl rubber), passing the tests according to **Hand Protection**

EN 374(EU), US F739 or AS/NZS 2161.1 standard.

If exposure limits are exceeded or if irritation or other symptoms are

Respiratory protection experienced, use a full-face respirator with multi-purpose combination (US) or

type AXBEK (EN 14387) respirator cartridges.

Skin and

Protection

Wear fire/flame resistant/retardant clothing and antistatic boots.

Physical and Chemical Properties Section 9

Appearance: Colorless or slightly yellow liquid **Odor:** No information available Odor Threshold: No information available pH: No information available

Melting Point/Freezing Point (°C): No information Initial Boiling Point and Boiling Range (°C): No

information available available

Flash Point (°C)(Closed Cup): No information **Evaporation Rate:** No information available

available **Upper/lower explosive limits[%(v/v)]:** Upper limit :

Flammability: Not applicable No information available ;Lower limit :No information

available

Relative Vapour Density(Air = 1): No information Vapor Pressure (MPa): No information available

available

Relative Density(Water=1): No information available

Body

n-Octanol/Water Partition Coefficient: No

information available

Decomposition Temperature (°C): No information Kinematic Viscosity (mm²/s): No information

available

Particle characteristics: Not applicable

Solubility: No information available

Auto-Ignition Temperature(°C): No information

available

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

Under normal conditions of storage and use, hazardous decomposition

products should not be produced. products

Section 11 Toxicological Information

> Acute Toxicity

| Component | CAS No. | LD ₅₀ (Oral) | LD ₅₀ (Dermal) | LC ₅₀ (Inhalation, 4h) |
|---|-----------|-------------------------|---------------------------|-----------------------------------|
| 1,1-bis(tert-but | | | | |
| y peroxy)-3,3,5-tr imethylcyclohe xane | 6731-36-8 | 12918mg/kg(Rat) | No information available | No information available |

> Skin Corrosion/Irritation

No information available

> Serious Eye Damage/Irritation

No information available

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

| ID | CAS No. | Component | IARC | NTP |
|----|-----------|---|------------|------------|
| 1 | 6731-36-8 | 1,1-bis(tert-buty peroxy)-3,3,5-trimethyl cyclohexane | Not Listed | Not Listed |

> Reproductive Toxicity

No information available

> Reproductive Toxicity (Additional)

No information available

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

May cause damage to organs through prolonged or repeated exposure(Category 2)(1,1-bis(tert-buty peroxy)-3,3,5-trimethylcyclohexane)

> Aspiration Hazard

No information available

Section 12 Ecological Information

> Acute Aquatic Toxicity

No information available

> Chronic Aquatic Toxicity

No information available

> Others

Persistence and Degradability

No information available

Bioaccumulative Potential

Mobility in Soil

No information available No information available

Results of PBT and vPvB Assessment

1,1-bis(tert-buty peroxy)-3,3,5-trimethylcyclohexane 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 Yes

UN Number 3101

UN Proper Shipping

ORGANIC PEROXIDE TYPE B,LIQUID Name

5.2 **Transport Hazard Class**

Transport Subsidiary

None **Hazard Class**

Packing Group Meet the class II packaging requirements

Regulatory Information Section 15

> International Chemical Inventory

| Component | EINECS | TSCA | DSL | IECSC | NZIoC | PICCS | KECI | AICS | ENCS |
|---|--------|----------|----------|----------|-------|-------|----------|------|----------|
| 1,1-bis(tert-buty peroxy)-3,3,5-trim ethylcyclohexane | √ | √ | √ | √ | √ | √ | √ | √ | √ |

[EINECS] European Inventory of Existing Commercial Chemical Substances.

United States Toxic Substances Control Act Inventory. [TSCA]

Canadian Domestic Substances List. [DSL]

| [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

" \checkmark " Indicates that the substance included in the regulations

"x" 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.