Chemical Book India

Chemical Safety Data Sheet MSDS / SDS	
Acetyl cyclohexanesulphonyl peroxide SDS	

Revision Date:2024-04-25 Revision Number:1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier	
Product name:	Acetyl cyclohexanesulphonyl peroxide
CAS:	3179-56-4

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

 Relevant identified
 For R&D use only. Not for medicinal, household or other use.

 uses:
 uses advised

 uses:
 none

 against:

Company Identification

Company:	Chemicalbook.in
Address:	5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090
Telephone:	+91 9550333722

SECTION 2: Hazards identification

Classification of the substance or mixture

GHS label elements, including precautionary statements

Signal word no data available

Hazard statement(s)

no data available

Precautionary statement(s)

Prevention

no data available

Response

no data available

Storage

no data available

Disposal

no data available

Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

Substance

Chemical name:	Acetyl cyclohexanesulphonyl peroxide
Common names and synonyms:	Acetyl cyclohexanesulphonyl peroxide
CAS number:	3179-56-4
EC number:	221-658-7
Concentration:	100%

SECTION 4: First aid measures

Description of necessary 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.

Most important symptoms/effects, acute and delayed

Excerpt from ERG Guide 148 [Organic Peroxides (Heat and Contamination Sensitive / Temperature Controlled)]: 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)

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

no data available

SECTION 5: Firefighting measures

Suitable extinguishing media

Excerpt from ERG Guide 148 [Organic Peroxides (Heat and Contamination Sensitive / Temperature Controlled)]: The temperature of the substance must be maintained at or below the "Control Temperature" at all times. SMALL FIRE: Water spray or fog is preferred; if water not available use dry chemical, CO2 or regular foam. LARGE FIRE: Flood fire area with water from a distance. Use water spray or fog; do not use straight streams. Do not move cargo or vehicle if cargo has been exposed to heat. *Nove* containers from fire area if you can do it without risk. FIRE INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is

out. BEWARE OF POSSIBLE CONTAINER EXPLOSION. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. (ERG, 2016)

Specific hazards arising from the chemical

Excerpt from ERG Guide 148 [Organic Peroxides (Heat and Contamination Sensitive / Temperature Controlled)]: May explode from heat, contamination or loss of temperature control. These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire. May ignite combustibles (wood, paper, oil, clothing, etc.). May ignite spontaneously if exposed to air. May be ignited by heat, sparks or flames. May burn rapidly with flare-burning effect. Containers may explode when heated. Runoff may create fire or explosion hazard. (ERG, 2016)

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

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.

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.

Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

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.

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.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

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.

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/flame 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

SECTION 9: Physical and chemical properties and safety characteristics

Physical state:	This liquid peroxide is particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently. It is generally stored or transported in a water slurry.
Colour:	no data available
Odour:	no data available
Melting point/freezing point:	no data available
Boiling point or initial boiling point and boiling range:	307.8°C at 760mmHg
Flammability:	no data available
Lower and upper explosion limit/flammability limit:	no data available
Flash point:	139.9°C
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH:	no data available
Kinematic viscosity:	no data available
Solubility:	no data available
Partition coefficient n- octanol/water:	no data available
Vapour pressure:	no data available

Density and/or
relative density:1.28g/cm3Relative vapour
density:no data availableParticle
characteristics:no data available

SECTION 10: Stability and reactivity

Reactivity

No rapid reaction with air. No rapid reaction with water.

Chemical stability

no data available

Possibility of hazardous reactions

Peroxides, such as ACETYL CYCLOHEXANESULFONYL PEROXIDE, are good oxidizing agents. Organic compounds can ignite on contact with concentrated peroxides. Strongly reduced material such as sulfides, nitrides, and hydrides may react explosively with peroxides. There are few chemical classes that do not at least produce heat when mixed with peroxides. Many produce explosions or generate gases (toxic and nontoxic). Generally, dilute solutions of peroxides (<70%) are safe, but the presence of a catalyst (often a transition metal such as cobalt, iron, manganese, nickel, or vanadium) as an impurity may even then cause rapid decomposition, a buildup of heat, and even an explosion. Solutions of peroxides often become explosive when evaporated to dryness or near-dryness. Danger of explosion when dry

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

SECTION 11: Toxicological information

Acute toxicity Oral: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

Aspiration hazard

no data available

SECTION 12: Ecological information

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

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

SECTION 13: Disposal considerations

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.

SECTION 14: Transport information

UN Number

ADR/RID: UN3115 (For reference only, please check.) IMDG: UN3115 (For reference only, please check.) IATA: UN3115 (For reference only, please check.)

UN Proper Shipping Name

ADR/RID: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (For reference only, please check.) IMDG: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (For reference only, please check.) IATA: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (For reference only, please check.)

Transport hazard class(es)

ADR/RID: 5.2 (For reference only, please check.) IMDG: 5.2 (For reference only, please check.) IATA: 5.2 (For reference only, please check.)

Packing group, if applicable

ADR/RID: (For reference only, please check.) IMDG: (For reference only, please check.) IATA: (For reference only, please check.)

Environmental hazards

ADR/RID: No IMDG: No IATA: No

Special precautions for user

no data available

Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question 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) Not Listed. (PICCS) Listed. Vietnam National Chemical Inventory Not Listed. IECSC) Not Listed. Korea Existing Chemicals List (KECL) Not Listed.

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=O&request_locale=en

CAWEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the

properties of the product. We as supplier shall not be held liable for any