

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-28

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

#### 1.1 Product identifiers

Product name : Cyclohexanethiol

Product Number : C107602
Brand : aladdin
CAS-No. : 1569-69-3

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

Identified uses : Laboratory chemicals, Manufacture of substances.

# 1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

## 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 3), H331

Skin corrosion/irritation (Category 2), H315

Skin sensitization (Category 1), H317

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 2), H411

## 2.2 GHS Label elements, including precautionary statements

Pictogram







Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapor



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H302 Harmful if swallowed

H315 Causes skin irritation
H400 Very toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition

sources. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/.../] equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

P330 Rinse mouth.
P391 Collect spillage.

P301+P312 IF SWALLOWED: call a POISON CENTER/doctor/... IF you feel unwell.

P302+P352 IF ON SKIN: wash with plenty of water.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN

with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use ... to extinguish.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : Cyclohexyl mercaptan ; Hexahydrothiophenol ; Mercaptocyclohexane

Formula : C6H11SH



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 Molecular weight
 : 116.22

 CAS No.
 : 1569-69-3

 EC-NO.
 : MFCD00001455

Component	Classification	Concentration
Cyclohexanethiol		
	Flammable liquids Category 3; Acute toxicity Category 4; Acute toxicity	98%
	Category 3; Skin corrosion/irritation Category 2; Skin sensitization	
	Category 1; Short-term (acute) aquatic hazard Category 1; Longterm	
	(chronic) aquatic hazard Category 2; H226, H302, H331, H315, H317,	
	H400, H411 M-Factor - Aquatic Acute: 1	

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 4.2 Most important symptoms and effects, both acute and delayed

最重要的已知症状及作用已在标签 (参见章节2.2) 和/或章节11中介绍

## 4.3 Indication of any immediate medical attention and special treatment needed

no data available

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

no data available

## 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides, Sulphur oxides



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## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to other sections

丢弃处理请参阅第13节。

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

## 8.2 Exposure controls

Appropriate engineering controls



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Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Immersion protection Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: > 480 min Material tested: Vitoject® (Aldrich Z677698, Size M) Splash protection Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: > 30 min Material tested: Camatril® (Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

no data available

#### **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance form: liquid color: Colorless to almost colorless clear

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 80.29°C f) Initial boiling point and boiling range 218°C g) Flash point 78.89°C

h) Evaporation rate no data available i) Flammability (solid, gas) no data available



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j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available

m) Relative density 0.95
n) Water solubility 不溶于水。

o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties N no data available t) Oxidizing properties N no data available

## 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Stable under recommended storage conditions.

## 10.2 Chemical stability

no data available

## 10.3 Possibility of hazardous reactions

Heat, flames and sparks.

#### 10.4 Conditions to avoid

Bases, Oxidizing agents, Reducing agents, Alkali metals

## 10.5 Incompatible materials

Hazardous decomposition products formed under fire conditions.- Carbon oxides, Sulphur oxides Other decomposition products - no data available

## 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation



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no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucousmembranes and upper respiratory tract.

Aspiration hazard

no data available

Additional Information

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available



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#### **SECTION 13:**

## 13.1 Disposal considerations

**Product** 

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

no data available

## **SECTION 14: Transport information**

DOT (US)

UN number: 3054 Packing group: III Class: 3

Proper shipping name: Cyclohexyl Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

mercaptan available available

Environmental Hazards: no data available

**IMDG** 

UN number: 3054 Packing group: III EMS-No: no data available

Proper shipping name: Cyclohexyl mercaptan

IATA

UN number: 3054 Packing group: III Class: 3

Proper shipping name: Cyclohexyl mercaptan

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

Further information

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