

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

# SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-10

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

### 1.1 Product identifiers

Product name : Thioacetic acid
Product Number : T112604
Brand : aladdin
CAS-No. : 507-09-5

# 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 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 4), H332

Serious eye damage (Category 1), H318

Skin sensitization (Category 1), H317

# 2.2 GHS Label elements, including precautionary statements

Pictogram







Signal word

Hazard statement(s)

Danger



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H225 Highly Flammable liquid and vapor

H301 Toxic if swallowed

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.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
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.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

P302 IF ON SKIN: P330 Rinse mouth.

P361 Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.

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

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
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+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 : Ethanethioic Acid; Thiolacetic acid; TAA; TMA



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Formula : C2H4OS

Molecular weight : 76.12

CAS No. : 507-09-5

EC-NO. : 208-063-8

Component	Classification	Concentration
Thioacetic acid		
	no data available	95%

#### SECTION 4: First aid measures

## 4.1 Description of first aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

no data available

### 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 Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media Foam Water

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides Sulfur oxides Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive



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mixtures with air at ambient temperatures.

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting 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 dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place. It is sensitive to air, heat, and humidity. Store at 2-8°C, filled with argon.

### 7.3 Specific end use(s)

no data available

### SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### 8.2 Exposure controls



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#### Appropriate engineering controls

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 glove's 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. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

**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 fullface particle respirator type N100 (US) or type P3 (EN 143) 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

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

### SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance form: Liquid color: Colorless to Yellow

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

e) Melting point/freezing point -17°C f) Initial boiling point and boiling range 88-91.5°C g) Flash point 52°F

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

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 no data available



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n) Water solubility Soluble in water. (27g/L) at 16°C.

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

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Violent reactions possible with: Metals Strong bases Exothermic reaction with: strong reducing agents Risk of ignition or formation of inflammable gases or vapours with: Strong oxidizing agents hydrogen sulphide Release of: sulphur dioxide can decompose violently in contact with: Water hydrogen sulphide

#### 10.4 Conditions to avoid

Warming.

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 200 - 350 mg/kg

(OECD Test Guideline 401)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach., Risk of aspiration upon vomiting., Pulmonary failure possible after aspiration of vomit. Oral: absorption



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Acute toxicity estimate Inhalation - 11,1 mg/l (Expert judgment)

Symptoms: Possible damages:, Irritation symptoms in the respiratory tract., Inhalation may lead to the formation of oedemas in the respiratory tract. Inhalation: absorption Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible effects on the eye (OECD Test Guideline 405)

Respiratory or skin sensitisation

Maximization Test - Guinea pig Result: positive (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative Test Type:

Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471 Result: negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: AJ5600000 Cough, Shortness of breath, Headache, Nausea Possible effect after contact with substance: Damage to: Kidney Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 2,1 mg/l - 48 h (OECD Test Guideline 202)

# 12.2 Persistence and degradability

Biodegradability Result: 84 % - Readily biodegradable. (OECD Test Guideline 301D) Remarks: (ECHA)

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil



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no data available

#### 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available

#### **SECTION 13:**

## 13.1 Disposal considerations

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

DOT (US)

UN number: 2436 Packing group: II Class: 3

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

ACID available available

Environmental Hazards: no

**IMDG** 

UN number: 2436 Packing group: II EMS-No: no data available

Proper shipping name: THIOACETIC ACID

IATA

UN number: 2436 Packing group: II Class: 3

Proper shipping name: THIOACETIC ACID

### **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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