

Shanghai Aladdin Biochemical Technology Co., Ltd.
No. 809, Chuhua Branch Road, Fengxian District, Shanghai

SAFETY DATA SHEET

Version: v1
Revision Date: 2024-01-29
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Pyridine
Product Number : P111516
Brand : aladdin
CAS-No. : 110-86-1

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 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Danger

Signal word

Hazard statement(s)

H225

Highly Flammable liquid and vapor

H315

Causes skin irritation

H319

Causes serious eye irritation

H402

Harmful to aquatic life

H302+H312+H332

Harmful if swallowed, in contact with skin or if inhaled

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.

P303+P361+P353

IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P332+P313

IF SKIN irritation occurs: Get medical advice/attention.

P337+P313

IF eye irritation persists: Get medical advice/attention.

P370+P378

In case of fire: Use ... to extinguish.

P403+P235

Store in a well-ventilated place. Keep cool.

P501

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

P301+P312+P330

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P304+P340+P312

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. if you feel unwell.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

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

Synonyms	: Azabenzene
Formula	: C ₅ H ₅ N
Molecular weight	: 79.1
CAS No.	: 110-86-1
EC-NO.	: 200-659-6

Component	Classification	Concentration
Pyridine	Flam. Liq. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H225, H302, H332, H312, ACS, ≥99.0% H315, H319	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

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. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Small (incipient) fires must be extinguished with alcohol resistant foam, dry chemical powder or carbon dioxide.

Large amounts of water are ineffective. Cool containers with large amounts of water.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

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

Carbon oxides Nitrogen oxides (NOx) 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 mixtures with air at ambient temperatures.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Light sensitive, Store in a dark.

7.3 Specific end use(s)

no data available

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Component	CAS No.	Value	Control parameters	Basis
Pyridine	110-86-1	PC-TWA	4 mg/m ³	Occupational exposure limits for hazardous factors in the workplace - chemical hazardous factors

8.2 Exposure controls

Appropriate engineering controls

Replace contaminated clothing immediately. Use skin protective lotion. Wash hands and wash your face after using this substance.

Personal protective equipment

Eye/face protection

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

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.

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance

form: liquid color: Colorless

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

b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-41.6°C
f) Initial boiling point and boiling range	115.2-115.3°C
g) Flash point	20°C
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	0.98
n) Water solubility	Soluble in most organic solvents such as water, alcohol and ether.
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

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with: perchloric acid nitrogen oxides halogen-halogen compounds Risk of ignition or formation of inflammable gases or vapours with: chlorosulfonic acid chromium(VI) oxide Acid anhydrides fuming sulfuric acid Oxidizing agents perchromates Nitric acid nitrogen dioxide Exothermic reaction with: Fluorine sulfuric acid silver perchlorate

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

rubber, various plastics, various metals

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10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 1.500 mg/kg Remarks: (ECHA)Symptoms: Vomiting, Nausea LC50 Inhalation - Rat - male - 4 h - 17,1 mg/l (US-EPA) Symptoms: mucosal irritations, Cough, Shortness of breath LD50 Dermal - Rabbit - > 1.000 - 2.000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit Result: Mild skin irritation - 24 h (Draize Test)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irritating to eyes. - 24 h Remarks: (ECHA)

Respiratory or skin sensitisation

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal injection Method: OECD Test Guideline 475 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

Repeated dose toxicity - Rat - male and female - Oral - 102 Weeks - NOAEL (No observed adverse effect level) - 7 mg/kg Not available burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Dizziness, tachycardia, nervousness, insomnia, Skin disorders, loss of appetite To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Systemic effects: After uptake: Headache In high doses: narcosis cardiovascular disorders Circulatory collapse Chronic uptake results in damage of: Liver Kidney Good warning effect due to low odour threshold. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

Phone: 400-620-6333 Email: Sale@aladdin-e.com Web: <https://www.aladdin-e.com>

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12.1 Toxicity

Toxicity to fish semi-static test EC50 - Danio rerio (zebra fish) - 560 - 1.000 mg/l - 96 h (OECD Test Guideline 203)
Remarks: (in analogy to similar products) Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 320 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products) Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata - 320 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) IC5 - Scenedesmus quadricauda (Green algae) - 120 mg/l - 7 d Remarks: (maximum permissible toxic concentration) (Lit.) EC50 - SELENASTRUM - 100,00 - 180,00 mg/l - 72 h

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 97 % - Readily biodegradable. (OECD Test Guideline 301B)

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

SECTION 13:

13.1 Disposal considerations

Product

Dispose of the remaining and non recyclable solution to a licensed company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1282

Proper shipping name: PYRIDINE

Environmental Hazards: no

IMDG

UN number: 1282

Proper shipping name: PYRIDINE

IATA

UN number: 1282

Packing group: II

Reportable Quantity(RQ): no data available

Packing group: II

Packing group: II

Class: 3

Poison Inhalation Hazard: no data available

EMS-No: no data available

Class: 3

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

Proper shipping name: PYRIDINE

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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