

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

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-22  
Print Date: 2024-01-30

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

### 1.1 Product identifiers

Product name : Anthracene  
Product Number : A119534  
Brand : aladdin  
CAS-No. : 120-12-7

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

Long-term (chronic) aquatic hazard (Category 1), H410

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

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H317 : May cause an allergic skin reaction  
H319 : Causes serious eye irritation  
H335 : May cause respiratory irritation  
H410 : Very toxic to aquatic life with long lasting effects

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#### Precautionary statement(s)

|                |  |
|----------------|--|
| P261           | Avoid breathing dust/fume/gas/mist/vapors/spray.   |
| P264           | Wash hands [and ...] thoroughly after handling.  |
| P271           | Use only outdoors or in a well-ventilated area.  |
| P272           | Contaminated work clothing should not be allowed out of the workplace.   |
| P273           | Avoid release to the environment.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P391           | Collect spillage.  |
| P302+P352      | IF ON SKIN: wash with plenty of water.   |
| 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.   |
| P337+P313      | IF eye irritation persists: Get medical advice/attention.  |
| P405           | Store locked up.   |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.   |
| P501           | Dispose of contents/container to an approved waste disposal plant.   |
| 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

|                  |             |
|------------------|-------------|
| Synonyms         | : Anthracin |
| Formula          | : C14H10    |
| Molecular weight | : 178.23    |
| CAS No.          | : 120-12-7  |
| EC-NO.           | : 204-371-1 |

| Component  | Classification   | Concentration          |
|------------|--|------------------------|
| Anthracene | Eye Irrit. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H400, H410 M-Factor - Aquatic Acute: 1.000 M-Factor - Aquatic Chronic: 100 | Melting point standard |

### 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

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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

Flush eyes with water as a precaution.

If swallowed

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

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

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### 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

Carbon oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

no data available

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### SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 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.

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## 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 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. Store in cool place.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Hazard composition and occupational exposure limits

| Component  | CAS No.  | Value                                    | Control parameters    | Basis   |
|------------|----------|--|-----------------------|---|
| anthracene | 120-12-7 | PC-TWA                                   | 0.2 mg/m <sup>3</sup> | Occupational exposure limits for workplace hazards - chemical hazards |
|            | Note     | G1 - Identification of human carcinogens |                       |   |

Biological limits

| Component  | CAS No.  | parameters      | Value      | Biological specimens | Basis                           |
|------------|----------|-----------------|------------|----------------------|---------------------------------|
| anthracene | 120-12-7 | 1-hydroxypyrene | 2.5 meter/ | urine                | ACGIH - biological limits (BEI) |

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|  |      |  |  |       |                                 |
|--|------|--|--|-------|---------------------------------|
|  | Note | At the end of the last working day of the week |  |       |                                 |
|  |      | 3-hydroxybenzopyrene                           |  | urine | ACGIH - biological limits (BEI) |
|  |      | At the end of the last working day of the week |  |       |                                 |

## 8.2 Exposure controls

Appropriate engineering controls

Operate according to industrial hygiene and safe use rules. Wash hands before rest and at the end of work.

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).

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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                                 |                   |
|---------------------------------|-------------------|
| a) Appearance                   | no data available |
| b) Odour                        | no data available |
| c) Odour Threshold              | no data available |
| d) pH                           | no data available |
| e) Melting point/freezing point | 214-219 (°C)      |

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|   |  |
|---|--|
| f) Initial boiling point and boiling range      | 342°C  |
| g) Flash point                                  | 121°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                             | 1.28   |
| n) Water solubility                             | Soluble in ethanol and ether, insoluble in water |
| 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

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## 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

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents, Hypochlorites

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

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#### Acute toxicity

LD50 Oral - Rat - male and female - > 16.000 mg/kg

Remarks: (ECHA)

Symptoms: Nausea, Diarrhea, gastric pain

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 1.320 mg/kg

Remarks: (ECHA)

#### Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation - 24 h Remarks: (ECHA) Possible damages: Dermatitis

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

Intracutaneous test - Guinea pig Result: negative Remarks: (ECHA)

#### Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: Mouse lymphoma test Metabolic activation:

Metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Ames test Test system:

Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative Remarks:

(ECHA) Test Type: Chromosome aberration test in vitro Test system: rat hepatocytes Metabolic activation: without

metabolic activation Method: OECD Test Guideline 473 Result: negative Test Type: In vivo micronucleus test

Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal injection Method: OECD Test Guideline

474 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

Possible tumor promoter., Headache, Nausea, Weakness

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Handle in accordance with good industrial hygiene and safety practice.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - *Lepomis macrochirus* (Bluegill) - 0,002 mg/l

- 96,0 h

Remarks: (ECHA)

Toxicity to daphnia

and other aquatic

invertebrates

static test LC50 - *Daphnia magna* (Water flea) - 0,036 mg/l - 48 h

(OECD Test Guideline 202)

### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 3,6 % - Not readily biodegradable. (OECD Test Guideline 302C)

### 12.3 Bioaccumulative potential

Bioaccumulation *Cyprinus carpio* (Carp) - 42 d at 25 °C - 0,015 mg/l (anthracene) Bioconcentration factor (BCF): 2.615 (OECD Test Guideline 305)

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

This substance is considered to be persistent, bioaccumulating and toxic (PBT). This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects. Discharge into the environment must be avoided.

## SECTION 13:

### 13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.



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Contaminated packaging  
Dispose of as unused product.

## SECTION 14: Transport information

### DOT (US)

|  |   |  |
|--|---|--|
| UN number: 3077  | Packing group: III                            | Class: 9                                       |
| Proper shipping name:<br>ENVIRONMENTALLY HAZARDOUS<br>SUBSTANCE, SOLID, N.O.S.<br>(anthracene) | Reportable Quantity(RQ): no data<br>available | Poison Inhalation Hazard: no data<br>available |
| Environmental Hazards: yes   |   |  |

### IMDG

|   |                    |                           |
|---|--------------------|---------------------------|
| UN number: 3077   | Packing group: III | EMS-No: no data available |
| Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (anthracene) |                    |                           |

### IATA

|   |                    |          |
|---|--------------------|----------|
| UN number: 3077   | Packing group: III | Class: 9 |
| Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (anthracene) |                    |          |

## 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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