

# SAFETY DATA SHEET

Version: v1

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

### 1.1 Product identifiers

Product name : 3,4-Benzopyrene  
Product Number : B110855  
Brand : aladdin  
CAS-No. : 50-32-8

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

Identified uses : Laboratory chemicals, Manufacture of substances.

### 1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION  
Address : 14078 Meridian Parkway,  
Riverside, CA. 92518  
Telephone : +1 (833) 552-7181  
Fax : no data available

### 1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300  
CHEMTREC®, Outside the USA :

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

|        |                                                      |
|--------|------------------------------------------------------|
| H317   | May cause an allergic skin reaction                  |
| H340   | May cause genetic defects                            |
| H350   | May cause cancer                                     |
| H360FD | May damage fertility; May damage the unborn child    |
| H400   | Very toxic to aquatic life                           |
| H410   | Very toxic to aquatic life with long lasting effects |

**Precautionary statement(s)**

|           |                                                                            |
|-----------|----------------------------------------------------------------------------|
| P261      | Avoid breathing dust/fume/gas/mist/vapors/spray.                           |
| 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. |
| P281      | Use personal protective equipment as required.                             |
| P321      | Specific treatment (see ... on this label).                                |
| P391      | Collect spillage.                                                          |
| P302+P352 | IF ON SKIN: wash with plenty of water.                                     |
| P333+P313 | IF SKIN irritation or rash occurs: Get medical advice/attention.           |
| P362+P364 | Take off contaminated clothing and wash it before reuse.                   |
| P405      | Store locked up.                                                           |
| P501      | Dispose of contents/container to an approved waste disposal plant.         |
| P203      | Obtain, read and follow all safety instructions before use.                |
| P318      | if exposed or concerned, get medical advice.                               |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS****SECTION 3: Composition/information on ingredients****3.1 Substances**

|                  |                                                    |
|------------------|----------------------------------------------------|
| Synonyms         | : 3,4-Benzpyrene Benzo[def]chrysene Benzo[a]pyrene |
| Formula          | : C20H12                                           |
| Molecular weight | : 252.31                                           |
| CAS No.          | : 50-32-8                                          |
| EC-NO.           | : 200-028-5                                        |

| Component       | Classification    | Concentration       |
|-----------------|-------------------|---------------------|
| 3,4-Benzopyrene | no data available | analytical standard |

**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**

If inhaled, please move the patient to fresh air. If breathing stops, give artificial respiration.

**In case of skin contact**

Rinse with soap and plenty of water. Consult a doctor.

**In case of eye contact**

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.

**If swallowed**

Do not feed anything from the mouth to an unconscious person. Rinse your mouth with water.

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

Burn, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting

**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**

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

**Unsuitable extinguishing media**

no data available

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides

**5.3 Advice for firefighters**

If necessary, wear a self-contained breathing apparatus to put out the fire.

**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**

Use personal protective equipment. Avoid dust generation. Avoid inhaling vapors, smoke, or gases. Ensure sufficient ventilation. Evacuate personnel to a safe area. Avoid inhaling dust.

**6.2 Environmental precautions**

If safety can be ensured, measures can be taken to prevent further leakage or overflow. Do not allow the product to enter the sewer.

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

Do not generate dust during collection and disposal. Sweep and shovel away. Place in a suitable closed container for processing.

**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 the formation of dust and aerosols. Provide suitable exhaust equipment in areas with dust generation.

### 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.

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### 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 EN166(EU).

##### Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard 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 respirator with multi-purpose 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

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## 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                 | 177-180°C              |
| f) Initial boiling point and boiling range      | 495°C                  |
| g) Flash point                                  | no data available      |
| 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                             | 1.35 g/cm <sup>3</sup> |
| n) Water solubility                             | no data available      |
| o) Partition coefficient: n-octanol/water       | log Pow: 5.97          |
| 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 oxidant

## 10.6 Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

May be harmful if inhaled. May cause respiratory irritation.

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

This product is or contains components classified as probable carcinogens by IARC, ACGIH, EPA, and NTP Possible Human Carcinogen 1 - Group 1: Carcinogenic to humans (Benzo[a]pyrene)

#### Reproductive toxicity

The risk of congenital malformations and deformities in infants is assumed to be caused by human reproductive toxins that can cause reproductive disorders

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

Inhalation may be harmful. May cause respiratory irritation.

#### Additional Information

no data available

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to water fleas and other aquatic invertebrates, EC50 - Daphnia magna (Water flea) - 0.25 mg/l - Toxicity to algae at 48 hours, EC50 - Pseudomonas subcapitata (green algae) - 0.02 mg/l - 72 h

### 12.2 Persistence and degradability

bioconcentration or bioaccumulation bluegill - 48 h -0.0005 mg/l/bioconcentration factor (BCF): 3,208

### 12.3 Bioaccumulative potential

no data available

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## 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

no data available

## 12.6 Other adverse effects

Toxic to aquatic organisms and has long-lasting effects. Avoid release into the environment.

## 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: 3077

Packing group: III

Class: 9

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Benzo[a]pyrene)

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data 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. (Benzo[a]pyrene)

### IATA

UN number: 3077

Packing group: III

Class: 9

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Benzo[a]pyrene)

## SECTION 15: Regulatory information

no data available

## SECTION 16: Other information

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SDS sections updated v1

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