

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

# 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 : Benzoyl chloride  
Product Number : B305868  
Brand : aladdin  
CAS-No. : 98-88-4

### 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)

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 3), H331


Acute toxicity, Dermal (Category 4), H312

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitization (Category 1), H317

### 2.2 GHS Label elements, including precautionary statements

|                            |  |
|----------------------------|--|
| Pictogram                  |   |
| Signal word                | Danger   |
| Hazard statement(s)        |  |
| H227                       | Combustible liquid   |
| H314                       | Causes severe skin burns and eye damage  |
| H317                       | May cause an allergic skin reaction  |
| H331                       | Toxic if inhaled   |
| H400                       | Very toxic to aquatic life   |
| H302+H312                  | Harmful if swallowed or in contact with skin   |
| Precautionary statement(s) |  |
| P210                       | Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.                                  |
| P235                       | Keep cool.   |
| 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.  |
| 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.   |
| P310                       | Immediately call a POISON CENTER or doctor/physician.  |
| P391                       | Collect spillage.  |
| P301+P312                  | IF SWALLOWED: call a POISON CENTER/doctor/... IF you feel unwell.  |
| P301+P330+P331             | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.   |
| 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+P233                  | Store in a well-ventilated place. Keep container tightly closed.   |
| 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

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### 3.1 Substances

|                  |  |
|------------------|--|
| Synonyms         | : $\alpha$ -Chlorobenzaldehyde; Benzenecarbonyl chloride; alpha-Chlorobenzaldehyde; Benzoic acid chloride; Basic Red 1 |
| Formula          | : C7H5ClO  |
| Molecular weight | : 140.57   |
| CAS No.          | : 98-88-4  |
| EC-NO.           | : 202-710-8  |

| Component        | Classification    | Concentration |
|------------------|-------------------|---------------|
| Benzoyl chloride | no data available | 99%           |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

In case of skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

In case of eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

If swallowed

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### 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

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

Unsuitable extinguishing media

no data available

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

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Carbon oxides Hydrogen chloride gas Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

### 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.

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## SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

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

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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Keep the container tightly closed in a dry and ventilated place. Moisture sensitive , Argon filled storage.

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

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## 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 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

Do not let product enter drains.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                               |
|--|-------------------------------|
| a) Appearance                              | form: Liquid color: Colorless |
| b) Odour                                   | no data available             |
| c) Odour Threshold                         | no data available             |
| d) pH                                      | no data available             |
| e) Melting point/freezing point            | -1°C                          |
| f) Initial boiling point and boiling range | 197.2°C                       |
| g) Flash point                             | 88°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                             | no data available |
| n) Water solubility                             | no data available |
| 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

Violent reactions possible with: Water Alkali metals Alkaline earth metals alkalines Amines sulfoxides Alcohols  
Strong oxidizing agents Risk of ignition or formation of inflammable gases or vapours with: Metals Risk of explosion  
with: dimethyl sulfoxide aluminium chloride sodium azide

### 10.4 Conditions to avoid

Exposure to moisture. Strong heating.

### 10.5 Incompatible materials

various metals, Strong oxidizing agents

### 10.6 Hazardous decomposition products

no data available

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 1.900 mg/kg

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(OECD Test Guideline 401)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l

(Expert judgment)

Acute toxicity estimate Inhalation - Expert judgment - 4 h - 0,51 mg/l Acute toxicity estimate Dermal - 1.100,1 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Dermal - Expert judgment - 1.100,1 mg/kg

Skin corrosion/irritation

Skin - Rabbit Result: Corrosive - 24 h Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Maximization Test - Guinea pig Result: positive (OECD Test Guideline 406) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Remarks: (IUCRID)

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: DM6600000

spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Lachrymation, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

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## 12.1 Toxicity

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 34,7 mg/l - 96 h

(OPPTS 850.1075)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 85 - 110 mg/l - 72 h

(OECD Test Guideline 201)

static test EC10 - Pseudokirchneriella subcapitata (green algae) - 37 - 47 mg/l - 72 h

(OECD Test Guideline 201)

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 20 d Result: 95 % - Readily biodegradable. (OECD Test Guideline 301D)

## 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

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.

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## SECTION 14: Transport information

DOT (US)

UN number: 1736

Packing group: II

Class: 8



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|   |   |  |
|---|---|--|
| Proper shipping name: BENZOYL<br>CHLORIDE | Reportable Quantity(RQ): no data<br>available | Poison Inhalation Hazard: no data<br>available |
| Environmental Hazards: no<br>IMDG         |   |  |
| UN number: 1736                           | Packing group: II                             | EMS-No: no data available                      |
| Proper shipping name: BENZOYL CHLORIDE    |   |  |
| IATA                                      |   |  |
| UN number: 1736                           | Packing group: II                             | Class: 8                                       |
| Proper shipping name: BENZOYL CHLORIDE    |   |  |

## SECTION 15: Regulatory information

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

## SECTION 16: Other information

|                         |  |
|-------------------------|--|
| <b>Prepared By</b>      | Regulatory Affairs<br>ALADDIN SCIENTIFIC CORPORATION<br>Email: QualityAssurance@aladdinsci.com |
| <b>Creation Date</b>    | 21-Jul-2021  |
| <b>Revision Date</b>    | 10-Jan-2024  |
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| <b>Revision Summary</b> | SDS sections updated v1  |

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