

# 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 : Mercury(II) iodide  
Product Number : M433991  
Brand : aladdin  
CAS-No. : 7774-29-0

### 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 2), H300

Acute toxicity, Inhalation (Category 2), H330

Acute toxicity, Dermal (Category 2), H310

Skin corrosion/irritation (Category 2), H315

Serious eye damage/eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Specific target organ toxicity - repeated exposure (Category 2), Kidney, H373

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

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Danger

Signal word

Hazard statement(s)

|                |                                                                |
|----------------|----------------------------------------------------------------|
| H315           | Causes skin irritation                                         |
| H317           | May cause an allergic skin reaction                            |
| H319           | Causes serious eye irritation                                  |
| H373           | Causes damage to organs through prolonged or repeated exposure |
| H410           | Very toxic to aquatic life with long lasting effects           |
| H300+H310+H330 | Fatal if swallowed, in contact with skin or if inhaled         |

Precautionary statement(s)

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P260           | Do not breathe dust/fume/gas/mist/vapors/spray.                                                                                  |
| P262           | Do not get in eyes, on skin, or on clothing.                                                                                     |
| 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.                                                       |
| P284           | [In case of inadequate ventilation] Wear respiratory protection.                                                                 |
| P314           | Get medical advice/attention if you feel unwell.                                                                                 |
| P391           | Collect spillage.                                                                                                                |
| 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.                                                                        |
| P361+P364      | Take off immediately all contaminated clothing and wash it before reuse.                                                         |
| 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.                                                               |
| P301+P310+P330 | IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER/doctor/.                                                             |
| P304+P340+P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.             |
| P302+P352+P310 | IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/doctor.                                                  |

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                        |
|------------------|----------------------------------------|
| Synonyms         | : Mercury(II) iodide, Mercury diiodide |
| Formula          | : HgI <sub>2</sub>                     |
| Molecular weight | : 454.4                                |
| CAS No.          | : 7774-29-0                            |
| EC-NO.           | : 231-873-8                            |

| Component          | Classification    | Concentration                                                        |
|--------------------|-------------------|----------------------------------------------------------------------|
| Mercury(II) iodide | no data available | red, for analysis ,<br>Premium-Grade<br>Reagents<br>ACS,Reag. Ph Eur |

## 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

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. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.

#### 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

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

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Unsuitable extinguishing media  
no data available

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

Hydrogen iodide, Mercury/mercury oxides.

**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**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. 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.

**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**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

**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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 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                 | 259°C             |
| f) Initial boiling point and boiling range      | 350°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 |

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|                                           |                               |
|-------------------------------------------|-------------------------------|
| l) Vapour density                         | no data available             |
| m) Relative density                       | 6.36g/cm <sup>3</sup> at 25°C |
| 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

Risk of explosion with: Alkali metals Risk of ignition or formation of inflammable gases or vapours with: halogen-halogen compounds

### 10.4 Conditions to avoid

Exposure to light may affect product quality. no information available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hydrogen iodide, Mercury/mercury oxides.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 18 mg/kg Remarks: (RTECS)

Acute toxicity estimate Inhalation - 4 h - 0.051 mg/l - dust/mist (Expert judgment)

Acute toxicity estimate Inhalation - Expert judgment - 4 h - 0.051 mg/l - dust/mist

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Acute toxicity estimate Dermal - Expert judgment - 5.1 mg/kg (Expert judgment)

Acute toxicity estimate Dermal - 5.1 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - Kidney

Aspiration hazard

no data available

Additional Information

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 0.13 mg/l - 96 h Remarks: (Lit.)

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 0.0052 mg/l - 48 h  
Remarks: (Lit.)

### 12.2 Persistence and degradability

no data available

### 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

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## 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: 1638

Packing group: II

Class: 6.1

Proper shipping name: MERCURY

Reportable Quantity(RQ): no data

Poison Inhalation Hazard: no data

IODIDE

available

available

Environmental Hazards: yes

IMDG

UN number: 1638

Packing group: II

EMS-No: no data available

Proper shipping name: MERCURY IODIDE

IATA

UN number: 1638

Packing group: II

Class: 6.1

Proper shipping name: MERCURY IODIDE

## SECTION 15: Regulatory information

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

## SECTION 16: Other information

Prepared By

Regulatory Affairs

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