

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-10

Print Date: 2024-01-17

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

1.1 Product identifiers

Product name : Thallium iodide
Product Number : T292456
Brand : aladdin
CAS-No. : 7790-30-9

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

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

Acute (short term) aquatic hazard (Category 2), H401

Long-term (chronic) aquatic hazard (Category 2), H411

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Hazard statement(s)

H300	Fatal if swallowed
H330	Fatal if inhaled
H373	Causes damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P260	Do not breathe 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.
P284	[In case of inadequate ventilation] Wear respiratory protection.
P391	Collect spillage.
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.

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

Synonyms	: Thallium(I) iodide
Formula	: TII
Molecular weight	: 331.29
CAS No.	: 7790-30-9
EC-NO.	: 232-199-7

Component	Classification	Concentration
Thallium iodide	Acute Tox. 2; STOT RE 2; Aquatic Chronic 2; H300, H330, H373, H411	Ultra dry, 99.99% metals basis

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.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Hydrogen iodide thallium oxides Not combustible. Ambient fire may liberate hazardous vapours.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

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). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle under argon. All process and process related activities must be carried out in an enclosed and ventilated space (e.g. glove box).

7.2 Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Air and moisture sensitive. Light sensitive. Argon storage

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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). 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Impermeable clothing, flame retardant and anti-static protective clothing, and the type of protective equipment must be selected according to the concentration and content of hazardous substances in the specific workplace.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Respiratory protection

If the hazard assessment indicates that the use of air purifying gas masks is required, please use the full mask type multi-functional gas mask (US) or abek type (EN 14387) gas mask barrel as an alternative for engineering control. If a gas mask is the only way to protect, use a full face mask. Respirators use respirators and parts that have been tested and passed government standards such as NIOSH (US) or cen (EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

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	440°C
f) Initial boiling point and boiling range	824°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	7.29
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

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Avoid moisture

10.5 Incompatible materials

Strong acids

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral - 5.1 mg/kg (Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute toxicity estimate Inhalation - 4 h - 0.051 mg/l - dust/mist (Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Dermal: No data available

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.

Aspiration hazard

no data available

Additional Information

RTECS: XG5425000 Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration., The most characteristic symptom of thallium exposure is alopecia (loss of hair). Cutaneous effects may include dry, Aldrich- 916447 Page 8 of 10 The life science business of Merck operates as MilliporeSigma in the US and Canada scaly skin and impairment of nail growth often resulting in the appearance of crescentshaped strips across fingernails and toenails (Mees' line). Other symptoms in acute poisoning relate chiefly to the gastrointestinal tract, nervous system, skin, eyes, and cardiovascular system. Acute poisoning results in swelling of the feet and legs, arthralgia, vomiting, insomnia, hyperesthesia and paresthesia of the hands and feet, mental confusion, polyneuritis with severe pain in the legs and loins, partial paralysis of the legs, angina-like pains, nephritis, wasting and weakness, and lymphocytosis and eosinophilia. In chronic poisoning, central and peripheral nervous system abnormalities may persist including ataxia, tremor, incoordination, paralysis of extremities, endocrine disorders, memory loss, and psychoses may develop., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

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

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

SECTION 14: Transport information

DOT (US)

UN number: 1707	Packing group: II	Class: 6.1
Proper shipping name: Thallium compound, n.o.s. (Thallium iodide)	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: yes		

IMDG

UN number: 1707	Packing group: II	EMS-No: no data available
Proper shipping name: Thallium compound, n.o.s. (Thallium iodide)		

IATA

UN number: 1707	Packing group: II	Class: 6.1
Proper shipping name: Thallium compound, n.o.s. (Thallium 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

ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

Creation Date

20-May-2021

Revision Date

10-Jan-2024

Print Date

17-Jan-2024

Revision Summary

SDS sections updated v1

Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.