

14078 Meridian Parkway, Riverside, CA. 92518

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 : Cerium(III) chloride heptahydrate

Product Number : C104761
Brand : aladdin
CAS-No. : 18618-55-8

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)

Acute toxicity, oral (Class 5), H303

Skin corrosion/irritation (Category 1C), H314

Severe eye injury/eye irritation (Category 1), H318

Acute (short-term) aquatic hazard (Category 1), H400

Long term aquatic hazards (Category 1), H410

2.2 GHS Label elements, including precautionary statements

Pictogram

E &

Signal word

Hazard statement(s)

H303 May be harmful if swallowed



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H314 Causes severe skin burns and eye damage

H410 Very 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.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P312 Call a POISON CENTER or doctor/... if you feel unwell.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

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].

P405 Store locked up.

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.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. If contact lenses are

worn and can be easily removed, remove Contact lenses. Continue rinsing.

Immediately call an emergency center/doctor.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Cerous chloride heptahydrate

Formula : CeCl3·7H2O Molecular weight : 372.58 CAS No. : 18618-55-8 EC-NO. : 232-227-8

Component	Classification	Concentration
Cerium(III) chloride heptahydrate		
	no data available	99.99% metals basis

SECTION 4: First aid measures

4.1 Description of first aid measures



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General advice

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

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 dry chemical, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas Cerium oxide Non combustible. Surrounding fire sources may cause the release of hazardous vapors

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

no data available

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.



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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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or general ventilation facilities. Avoid eye and skin contact and avoid breathing vapor. See Section 8 for personal protective measures. Keep away from fire and heat sources, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. If canning is required, the flow rate should be controlled, and there should be a grounding device to prevent the accumulation of static electricity. Avoid contact with incompatible substances such as oxidizing agents (see section 10 for incompatible substances). When handling, it should be lightly loaded and unloaded to prevent damage to packaging and containers. Empty containers may be harmful residues. Wash hands after use and prohibit eating or drinking in the workplace. Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emer

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and ventilated warehouse. Easy to absorb moisture, dry 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

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



9.1

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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

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

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

a) Appearance form: Powder or Crystals color: White to Light Yellow

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 848°C

f) Initial boiling point and boiling range no data available 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 3.94

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



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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.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Moisture proof.

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 oral - rats - males and females -2800 mg/kg

(OECD Testing Guidelines 401)

Remarks: (anhydrous substance)

Symptoms: Mucosal irritation in the mouth, throat, esophagus, and digestive tract

Symptoms: Mucosal irritation, cough, shortness of breath, possible damage:, damage to respiratory tract

Skin corrosion/irritation

Skin - Rabbit Result: After 1 to 4 hours of exposure, there was a corrosive effect -1 to 4 hours (OECD Testing

Guidelines 404) Remarks: (anhydrous substance)

Serious eye damage/eye irritation

Causing serious eye damage.

Respiratory or skin sensitisation

Maximum Response Test - Guinea Pig Result: Negative (OECD Testing Guidelines 406) Remarks: (anhydrous

substance)

Germ cell mutagenicity



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Test Type: Ames Test System: Salmonella Typhimurium Metabolic Activation: With or Without Metabolic Activation

Method: OECD Test Guideline 471 Result: Negative Remarks: (Anhydrous Substances)

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

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

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish semi static test LC50- Oncorhynchus mykiss (rainbow trout) -0.3 mg/l -96 hours (OECD Testing Guidelines 203)

Note: Corresponding values have been specified for the following substances: cerium nitrate

Toxic growth inhibition of algae EC50- Pseudokirchniella subcapitata (green algae) -1.1 mg/l -72 hours

(OECD Testing Guidelines 201)

Remarks: (anhydrous substance)

(Selenium chloride hydrate)

Growth inhibition NOEC - Pseudokirchniella subcapitata (green algae) -0.81 mg/l -72 hours

(OECD Testing Guidelines 201)

Remarks: (anhydrous substance)

(Selenium chloride hydrate)

Toxicity to bacteria Remarks: (Anhydrous substance)

(Selenium chloride hydrate)

Remarks: (anhydrous substance)

(Selenium chloride hydrate)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available



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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

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: 3260 Packing group: III Class: 8

Proper shipping name: Inorganic acidic Reportable Quantity(RQ): no data

Poison Inhalation Hazard: no data

corrosive solid, n.o.s. (Selenium available available

chloride hydrate)

Environmental Hazards: yes

IMDG

UN number: 3260 Packing group: III EMS-No: no data available

Proper shipping name: Inorganic acidic corrosive solid, n.o.s. (Selenium chloride hydrate)

IATA

UN number: 3260 Packing group: III Class: 8
Proper shipping name: Inorganic acidic corrosive solid, n.o.s. (Selenium chloride hydrate)

SECTION 15: Regulatory information

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

SECTION 16: Other information

Regulatory Affairs

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