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

SAFETY DATA SHEET

Version: v1
Revision Date: 2025-09-22
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SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	: Chromium(III) chloride hexahydrate
Product Number	: C431217
Brand	: aladdin
CAS-No.	: 10060-12-5

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)

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals Category 1

Acute oral toxicity Category 4

Skin Sensitization Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H290	May be corrosive to metals
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H411	Toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P234	Keep only in original container.
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.
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.
P330	Rinse mouth.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301+P312	IF SWALLOWED: call a POISON CENTER/doctor/... IF you feel unwell.
P302+P352	IF ON SKIN: wash with plenty of water.
P333+P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P406	Store in corrosive resistant/... container with a resistant inner liner.
P501	Dispose of contents/container to an approved waste disposal plant.

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

Contact with water liberates toxic gas

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	:	Hexaaquachromium(III) chloride, Chromium trichloride hexahydrate
Formula	:	$CrCl_3 \cdot 6H_2O$
Molecular weight	:	266.44
CAS No.	:	10060-12-5
EC-NO.	:	233-038-3

Component	Classification	Concentration
Chromium(III) chloride hexahydrate		
	no data available	≥96%

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
Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.
In case of skin contact
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.
In case of eye contact
RinseImmediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed
Clean mouth with water and drink afterwards plenty of water.

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
Water,Foam,Carbon dioxide (CO2),Dry powder
Unsuitable extinguishing media
no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

wear self-contained breathing and full protective gear.

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

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

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

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

9.1 Information on basic physical and chemical properties

a) Appearance	form: Solid color: Dark green
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	83°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	1.76g/mLat 25°C (lit.)
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.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Excess heat. Avoid dust formation. Exposure to moist air or water.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hydrogen chloride gas

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat -1790 mg/kg
Note: (RTECS)
Inhalation: No data available
Transcutaneous: No data available
No data available

Skin corrosion/irritation
Skin - Rabbit Result: No skin irritation -4 hours (OECD Testing Guideline 404) Note: Corresponding values have been specified for the following substance: chromium chloride

Serious eye damage/eye irritation
Eyes - Rabbit Result: No eye irritation (OECD Testing Guideline 405) Note: Corresponding values have been specified for the following substance: chromium chloride

Respiratory or skin sensitisation
Maximum Response Test - Guinea Pig Result: Positive This product is a skin sensitizer, sub column name 1B. (OECD Testing Guideline 406) Note: Corresponding values have been specified for the following substance: chromium chloride

Germ cell mutagenicity
Test type: Ames test Testing System: Salmonella Typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guideline 471 Result: Negative Test type: Mutational (mammalian cell test): Chromosomal mutation negative Method: OECD Testing Guideline 473 Result: Negative Note: Corresponding values have been specified for the following substances: Chromium chloride test type: Mutability (mammalian cell test): Micronucleus positive Testing system: Chinese hamster ovary cells Result: Negative Remarks: (ECHA) Corresponding values have been specified for the following substances: Chromium chloride test type: Sister chromatid exchange test Testing system: Chinese hamster ovary cells Method: OECD Testing Guidelines 479 Result: Negative Note: Corresponding values have been specified for the following substance: chromium chloride

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

Registration of Toxic Effects of Chemical Substances: GB5450000

To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully studied.

Unlike chromium (VI) compounds, chromium (III) compounds are not carcinogenic in animal experiments Compared to hexavalent chromium, it is only minimally absorbed in the digestive tract

(<1%). The unabsorbed portion of trivalent chromium will be excreted with feces

Other hazards cannot be ruled out.

Operate in accordance with good industrial hygiene and safety regulations.

SECTION 12: Ecological information

12.1 Toxicity

Static toxicity test on fish LC50- Oncorhynchus mykiss (rainbow trout) -11.2-31.5 mg/l-96 h

(OECD Testing Guidelines 203)

Note: (For cations)

Static toxicity test on water fleas and other aquatic invertebrates EC50- Daphnia similis -9.9 mg/l -48 h

(OECD Testing Guidelines 202)

Note: Corresponding values have been specified for the following substance: chromium chloride

Toxicity to algae ErC50- Scenedesmus capricornutum (freshwater algae) -2.0 mg/l -96 h

(OECD Testing Guidelines 201)

Semi static test for toxicity (chronic toxicity) to water fleas and other aquatic invertebrates NOEC - Daphnia magna - 3.4 mg/l -21 days

(OECD Testing Guideline 211)

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

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: UN3260	Packing group: III	Class: 8
Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: yes		

IMDG

UN number: UN3260	Packing group: III	EMS-No: no data available
Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.		

IATA

UN number: UN3260	Packing group: III	Class: 8
Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.		

SECTION 15: Regulatory information

Please note that waste disposal should also meet local regulations. If applicable, the chemical meets the requirements of the Regulations on the Safety Management of Hazardous Chemicals (adopted by the State Council on December 4, 2013).

SECTION 16: Other information

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