

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

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-16  
Print Date: 2024-01-23

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

### 1.1 Product identifiers

Product name : Chromium(III) nitrate nonahydrate  
Product Number : C434117  
Brand : aladdin  
CAS-No. : 7789-02-8

### 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)  
Oxidizing solids (Category 3), H272

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Skin sensitization (Sub-category 1B), H317

Long-term (chronic) aquatic hazard (Category 3), H412

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

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Hazard statement(s)	
H272	May intensify fire; oxidizer
H303	May be harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P220	Keep away from clothing and other combustible materials.
P221	Take any precaution to avoid mixing with combustibles/...
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
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.
P312	Call a POISON CENTER or doctor/... if you feel unwell.
P391	Collect spillage.
P302+P352	IF ON SKIN: wash with plenty of water.
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.
P370+P378	In case of fire: Use ... to extinguish.
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**

**3.1 Substances**

Synonyms	: Chromic Nitrate, Chromium(III) nitrate nonahydrate
Formula	: CrN3O9·9H2O
Molecular weight	: 400.15
CAS No.	: 7789-02-8
EC-NO.	: 236-921-1

Component	Classification	Concentration
Chromium(III) nitrate nonahydrate		

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Component	Classification	Concentration
	no data available	Premium-Grade Reagents , for Analysis,

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## 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

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

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## 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

Nitrogen oxides (NOx) Chromium oxides Not combustible. Has a fire-promoting effect due to release of oxygen.

Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

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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

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

### 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

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#### 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.

## 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	60°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	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

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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 ignition or formation of inflammable gases or vapours with: combustible substances Violent reactions possible with: strong reducing agents

### 10.4 Conditions to avoid

Heat.

### 10.5 Incompatible materials

Metals

### 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 - male and female - 3.250 mg/kg (OECD Test Guideline 401)

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

Maximization Test - Guinea pig Result: positive The product is a skin sensitizer, sub-category 1B. (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: reverse mutation assay Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Remarks: The value is given in analogy to

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the following substances: Chromium(III) nitrate Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells Method: OECD Test Guideline 479 Result: negative Remarks: The value is given in analogy to the following substances: Chromium(III) nitrate Test Type: Mutagenicity (mammal cell test): chromosome aberration. Method: OECD Test Guideline 473 Result: negative Remarks: The value is given in analogy to the following substances: Chromium(III) nitrate Test Type: Micronucleus test Species: Mouse Method: OECD Test Guideline 474 Result: negative

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

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish static test LC50 - Trout - 20,1 mg/l - 96 h

(OECD Test Guideline 203)

flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 24,1 mg/l - 96 h

(OECD Test Guideline 203)

Remarks: The value is given in analogy to the following substances: Chromium(III) nitrate The value is given in analogy to the following substances: Chromium trinitrate

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 76,9 - 268,6 mg/l - 48 h

Remarks: The value is given in analogy to the following substances: Chromium(III) nitrate

### 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: 2720

Packing group: III

Class: 5.1

Proper shipping name: CHROMIUM

Reportable Quantity(RQ): no data available

Poison Inhalation Hazard: no data available

NITRATE

Environmental Hazards: no

IMDG

UN number: 2720

Packing group: III

EMS-No: no data available

Proper shipping name: CHROMIUM NITRATE

IATA

UN number: 2720

Packing group: III

Class: 5.1

Proper shipping name: CHROMIUM NITRATE

## 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

08-Nov-2023

Revision Date

16-Jan-2024



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**Print Date**

23-Jan-2024

**Revision Summary**

SDS sections updated v1

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