

SAFETY DATA SHEET

Version: v2
Revision Date: 2025-12-23
Print Date: 2025-12-23

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

1.1 Product identifiers

Product name : Vanadium(III) chloride tetrahydrofuran adduct
Product Number : V282381
Brand : aladdin
CAS-No. : 19559-06-9

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 4]

Acute toxicity - Dermal [Category 4]

Acute toxicity - Inhalation (Dusts/Mists) [Category 4]

Skin corrosion/irritation [Category 1] [Sub-category B]

Serious eye damage/eye irritation [Category 1]

Flammable solid [Category 1]

2.2 GHS Label elements, including precautionary statements

Pictogram



Danger

Signal word

Hazard statement(s)

H228

Flammable solid

H314

Causes severe skin burns and eye damage

H302+H312+H332

Harmful if swallowed, in contact with skin or if inhaled

Precautionary statement(s)

P210

Keep away from heat, hot surface, sparks, open flames and other ignition sources.
- No smoking.

P240

Ground/bond container and receiving equipment.

P241

Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

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.

P271

Use only outdoors or in a well-ventilated area.

P280

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

P321

Specific treatment (see ... on this label).

P330

Rinse mouth.

P363

Wash contaminated clothing before reuse.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352

IF ON SKIN: wash with plenty of water.

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P362+P364

Take off contaminated clothing and wash it before reuse.

P370+P378

In case of fire: Use ... to extinguish.

P405

Store locked up.

P501

Dispose of contents/container to an approved waste disposal plant.

P301+P317

IF SWALLOWED: Get medical help.

P305+P354+P338

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P317

Get emergency medical help.

P302+P361+P354

IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.

P316

Get emergency medical help immediately.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: no data available
Formula	: $C_{12}H_{24}Cl_3O_3V$
Molecular weight	: 373.61
CAS No.	: 19559-06-9
EC-NO.	: 664-285-9

Component	Classification	Concentration
Vanadium(III) chloride tetrahydrofuran adduct		
	no data available	≥97%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician if necessary. Remove to fresh air.

If inhaled

Transfer to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

In case of skin contact

If necessary, consult a doctor. Wash immediately with soap and plenty of water, and remove all contaminated clothing and shoes at the same time. Wash contaminated clothing before reuse. Rinse immediately with plenty of water. If skin irritation persists, call your doctor.

In case of eye contact

Wash with plenty of water.

If swallowed

Never feed anything to an unconscious person. Rinse your mouth and drink more 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

Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

5.3 Advice for firefighters

Wear self-contained breathing and full protective equipment

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

See Section 12 for additional Ecological Information. Prevent product from entering drains. Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

If safety requires, prevent further leakage or spillage. Use personal protective equipment as needed. Cover the powder spillage with plastic cloth or waterproof cloth to minimize diffusion and keep the powder dry. Use the machine to lift and place in a suitable container for disposal. Avoid dust generation. Thoroughly clean contaminated surfaces.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

May cause damage to organs through prolonged or repeated exposure. Thermal decomposition can lead to release

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

of toxic/corrosive gases and vapors.

7.2 Conditions for safe storage, including any incompatibilities

May form explosive peroxides. moisture sensitive; Air sensitive , 2-8 °C, store with argon filling.

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: Red to orange-red to orange to dark red with black to purple
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	265 °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
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

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

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon oxides. Phosgene.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate orally -500.1 mg/kg

(Expert judgment)

Acute toxicity estimate inhalation -4 hours -1.6 mg/l - dust/smoke

(Expert judgment)

Acute toxicity estimate transdermal -1100.1 mg/kg

(Expert judgment)

Skin corrosion/irritation

Note: Causes skin burns.

Serious eye damage/eye irritation

Note: Causing serious eye damage.

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

no data available

Aspiration hazard

no data available

Additional Information

Heartfelt: cough, wheezing, pharyngitis, shortness of breath, spasms, inflammation, sore throat, spasms, inflammation,

bronchitis, pneumonia, pulmonary edema, this substance

The damage to mucosal tissue, upper respiratory tract, eyes, and skin is enormous. To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully elucidated Research.

SECTION 12: Ecological information

12.1 Toxicity

no data available

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

Should not be released into the environment. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: UN2925

Packing group: II

Class: 4.1(8)

Proper shipping name: Flammable solids, corrosive, organic, n.o.s.

Reportable Quantity(RQ):no data available

Poison Inhalation Hazard:no data available

Environmental Hazards: No

IMDG

UN number: UN2925

Packing group: II

EMS-No: F-A,S-G

Proper shipping name: Flammable solids, corrosive, organic, n.o.s.

IATA

UN number: UN2925

Packing group: II

Class: 4.1(8)

Proper shipping name: Flammable solids, corrosive, organic, 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**Prepared By**

Regulatory Affairs

ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

Creation Date

08-Dec-2022

Revision Date

23-Dec-2025

Print Date

23-Dec-2025

Revision Summary

SDS sections updated v2

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.