

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-02-11

Print Date: 2024-02-15

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

1.1 Product identifiers

Product name : Cyclopentadienylvanadium tetracarbonyl

Product Number : C282377

Brand : aladdin

CAS-No. : 12108-04-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

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]

Acute toxicity - Dermal[Category 2]

Acute toxicity - Inhalation (Dusts/Mists) [Category 2]

Skin corrosion/irritation [Category 2]

Serious eye damage/eye irritation[Category 2A]

Specific target organ toxicity (single exposure) [Category 3]

2.2 GHS Label elements, including precautionary statements

Pictogram no data available

Signal word Danger

Hazard statement(s)

H315 Causes skin irritation



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H319 Causes serious eye irritation
H335 May cause respiratory irritation

H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.
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.

P284 [In case of inadequate ventilation] Wear respiratory protection.

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

 $\begin{tabular}{lll} Formula & : $C_9H_5O_4V$ \\ Molecular weight & : 228.08 \\ CAS No. & : $12108-04-2$ \\ EC-NO. & : no data available \\ \end{tabular}$

Component Classification Concentration

Cyclopentadienylvanadium tetracarbonyl

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

Wash skin with soap and water.

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.



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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 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.

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



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Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature.

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) Appearanceb) Odourc) Odour Thresholdno data availableno data available



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| no data available |
|-------------------|
| |

e) Melting point/freezing point 138 °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

no data available explosive limits no data available k) Vapour pressure no data available I) Vapour density m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity s) Explosive properties N no data available no data available t) Oxidizing properties N

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

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information



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11.1 Information on toxicological effects

Acute toxicity

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

no data available

Aspiration hazard

no data available

Additional Information

no data available

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



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SECTION 13:

13.1 Disposal considerations

Product

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: UN3466 Packing group: II Class: 6.1

Proper shipping name: Metal carbonyls, Reportable Quantity(RQ): no data

Poison Inhalation Hazard: no data

solid, n.o.s. available available

Environmental Hazards: no data available

IMDG

UN number: UN3466 Packing group: II EMS-No: F-A,S-A

Proper shipping name: Metal carbonyls, solid, n.o.s.

IATA

UN number: UN3466 Packing group: II Class: 6.1

Proper shipping name: Metal carbonyls, solid, 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

Further information

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