



<a href="#">Vanadium Chloride</a>		<a href="#">Pricing &gt;</a>
<a href="#">Vanadium Chloride Solution</a>		<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	VCl <sub>2</sub>	
<b>Pubchem CID</b>	66355	
<b>MDL Number</b>	MFCD00043084	
<b>EC No.</b>	234-176-7	
<b>IUPAC Name</b>	Dichlorovanadium	
<b>Beilstein/Reaxys No.</b>	N/A	
<b>SMILES</b>	Cl[V]Cl	
<b>Inchl Identifier</b>	InChI=1S/2ClH.V/h2*1H;/q;;+2/p-2	
<b>Inchl Key</b>	ITAKKORXEUJTBC-UHFFFAOYSA-L	
<b>Signal Word</b>	Danger	
<b>Hazard Statements</b>	H302-H314	
<b>Hazard Codes</b>	N/A	
<b>Precautionary Statements</b>	P280-P305 + P351 + P338-P310	
<b>Flash Point</b>	Not applicable	
<b>Risk Codes</b>	20/21/22-34	
<b>Safety Statements</b>	26-27-36/37/39	
<b>RTECS Number</b>	YW1575000	
<b>Transport Information</b>	UN 3260 8 / PGII	
<b>WGK Germany</b>	3	
<b>GHS Pictograms</b>	<p><a href="#">GHS05</a> <a href="#">Corrosive</a></p>  <p><a href="#">GHS07</a> <a href="#">Exclamation Point</a></p> 	

# SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

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## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #10580-52-6

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

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## 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), H302  
Skin corrosion (Category 1A), H314  
Serious eye damage (Category 1), H318

2.2 GHS Label elements, including precautionary statements



Pictogram  
Signal word Danger  
Hazard statement(s)  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
Precautionary statement(s)  
P260 Do not breathe dust or mist.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/ protective clothing/ eye

protection/ face

protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

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## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.1 Substances**

Formula : Cl<sub>2</sub>V

Molecular weight : 121.85 g/mol

CAS-No. : 10580-52-6

EC-No. : 234-176-7

Hazardous components

Component Classification Concentration

Vanadium(II) chloride

Acute Tox. 4; Skin Corr. 1A;

Eye Dam. 1; H302, H314

<= 100 %

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## **SECTION 4. FIRST AID MEASURES**

### **4.1 Description of first aid measures**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not

breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

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## **SECTION 5. FIREFIGHTING MEASURES**

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas, Vanadium/vanadium oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas.

Ensure adequate

ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust.

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 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

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components with workplace control parameters

Component CAS-No. Value Control parameters

Basis

Vanadium(II)

chloride

10580-52-6 C 0.050000

mg/m<sup>3</sup>

USA. NIOSH Recommended

Exposure Limits

Remarks 15 minute ceiling value

C 0.050000

mg/m<sup>3</sup>

USA. NIOSH Recommended

Exposure Limits

15 minute ceiling value

C 0.05 mg/m<sup>3</sup> USA. NIOSH Recommended

Exposure Limits

15 minute ceiling value

C 0.05 mg/m<sup>3</sup> USA. NIOSH Recommended

Exposure Limits

15 minute ceiling value

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 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.

Body Protection

Complete suit protecting against chemicals, 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 full-face 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.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

a) Appearance Form: powder

Colour: light green

b) Odor No data available

c) Odor Threshold No data available

d) pH No data available

e) Melting point/freezing

point  
No data available  
f) Initial boiling point and  
boiling range  
No data available  
g) Flash point N/A  
h) Evaporation rate No data available  
i) Flammability (solid, gas) No data available  
j) Upper/lower  
flammability or  
explosive limits  
No data available  
k) Vapor pressure No data available  
l) Vapor density No data available  
m) Relative density 3.09 g/mL at 25 °C (77 °F)  
n) Water solubility No data available  
o) Partition coefficient: noctanol/  
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 No data available  
t) Oxidizing properties 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  
No data available  
10.4 Conditions to avoid  
No data available  
10.5 Incompatible materials  
Strong oxidizing agents  
10.6 Hazardous decomposition products  
Other decomposition products - No data available  
In the event of fire: see section 5

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute toxicity  
LD50 Oral - Rat - 540 mg/kg  
Inhalation: No data available  
Dermal: No data available  
No data available  
Skin corrosion/irritation  
Serious eye damage/eye irritation  
No data available  
Respiratory or skin sensitisation  
Germ cell mutagenicity  
No data available  
Carcinogenicity  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
Reproductive toxicity  
No data available  
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  
RTECS: YW1575000  
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,  
spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary  
edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

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## **SECTION 12. ECOLOGICAL INFORMATION**

12.1 Toxicity  
12.2 Persistence and degradability  
12.3 Bioaccumulative potential  
No data available  
12.4 Mobility in soil  
No data available  
12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted



## 12.6 Other adverse effects

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

### DOT (US)

UN number: 3260 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Vanadium(II) chloride)

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

### IMDG

UN number: 3260 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Vanadium(II) chloride)

### IATA

UN number: 3260 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Vanadium(II) chloride)

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## **SECTION 15. REGULATORY INFORMATION**

### SARA 313 Components

Vanadium(II) chloride

CAS-No.

10580-52-6

Revision Date

2007-07-01

### SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components  
CAS-No. Revision Date  
Vanadium(II) chloride 10580-52-6 2007-07-01  
New Jersey Right To Know Components  
Vanadium(II) chloride  
CAS-No.  
10580-52-6  
Revision Date  
2007-07-01  
California Prop. 65 Components  
This product does not contain any chemicals known to  
State of California to cause cancer, birth defects, or  
any other  
reproductive harm.

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## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

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