

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

1 Identification

- **Product identifier**
- **Trade name:** Vanadium(V)oxide 10.0% in petrolatum
- **Article number:** V-005
- **Application of the substance / the mixture** Diagnosis of contact allergy
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Chemotechnique MB Diagnostics AB
Modemgatan 9
235 39 VELLINGE
SWEDEN
- **Information department:** Product safety department.
- **Emergency telephone number:**
8.00 to 16.00 (CET): +46 (0)40 466 077
Local emergency services during non-office hours

2 Hazard(s) identification

- **Classification of the substance or mixture**

Acute Toxicity - Inhalation 2	H330	Fatal if inhaled.
Germ Cell Mutagenicity 2	H341	Suspected of causing genetic defects.
Carcinogenicity 2	H351	Suspected of causing cancer.
Toxic to Reproduction 2	H361	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Repeated Exposure 1	H372-H373	Causes damage to the respiratory system and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation. May cause damage to organs through prolonged or repeated exposure.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 1)

· **Hazard pictograms**



GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

divanadium pentaoxide

· **Hazard statements**

Fatal if inhaled.

Suspected of causing genetic defects.

Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to the respiratory system and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation. May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

[In case of inadequate ventilation] wear respiratory protection.

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

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment is urgent (see on this label).

Get medical advice/attention if you feel unwell.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 4

Fire = 0

Reactivity = 0

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 2)

· **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

1314-62-1	divanadium pentaoxide	10.0%
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· **Non-hazardous ingredients**

8009-03-8	Petrolatum	90.0%
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4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 3)

- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

1314-62-1	divanadium pentaoxide	0.64 mg/m ³
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· **PAC-2:**

1314-62-1	divanadium pentaoxide	7 mg/m ³
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· **PAC-3:**

1314-62-1	divanadium pentaoxide	70 mg/m ³
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US

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 4)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
FOR EXTERNAL/TOPICAL USE ONLY.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store at temperatures between 2 °C and 8 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

· Control parameters

- **Components with limit values that require monitoring at the workplace:**

1314-62-1 divanadium pentaoxide

PEL	Ceiling limit value: 0.5* 0.1** mg/m ³ as V ₂ O ₅ ,*respirable dust **fume
REL	Ceiling limit value: 0.05* mg/m ³ *15-min, except V metal and carbide
TLV	Long-term value: 0.05* mg/m ³ *as inhalable particulate matter, A3

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 5)

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 6)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solidified mass

Color: Yellow

· Odor: undistinguishable

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 1,750 °C (35.250 °F)

· Flash point: Not applicable.

· Flammability: Not determined.

· Decomposition temperature: Not determined.

· Ignition temperature: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure: Not applicable.

· Density: Not determined.

· Relative density: Not determined.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 7)

Kinematic:	Not applicable.
· Solvent content: VOC content:	0.00 %
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	2,200 mg/kg (ATE)
Inhalative	LC50/4 h	0.5 mg/l (ATE)

1314-62-1 divanadium pentaoxide

Oral	LD50	220 mg/kg (ATE) 10 mg/kg (rat)
Inhalative	LC50/4 h	0.05 mg/l (ATE)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 8)

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Very toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

1314-62-1 divanadium pentaoxide

2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

— US —

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 9)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN3285
· UN proper shipping name	
· DOT, IATA	Vanadium compound, n.o.s. (divanadium pentaoxide)
· IMDG	VANADIUM COMPOUND, N.O.S. (divanadium pentaoxide)
· Transport hazard class(es)	
· DOT	
	
· Class	6.1 Toxic substances
· Label	6.1
· IMDG, IATA	
	
· Class	6.1 Toxic substances
· Label	6.1

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 10)

· Packing group	
· DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Toxic substances
· Hazard identification number (Kemler code):	60
· EMS Number:	F-A,S-A
· Stowage Category	B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 25 kg On cargo aircraft only: 100 kg
· IMDG	
· Limited quantities (LQ)	500 g
· Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 3285 VANADIUM COMPOUND, N.O.S. (DIVANADIUM PENTAOXIDE), 6.1, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

1314-62-1 divanadium pentaoxide

· **Section 313 (Specific toxic chemical listings):**

1314-62-1 divanadium pentaoxide

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 11)

· **TSCA (Toxic Substances Control Act):**

1314-62-1	divanadium pentaoxide	ACTIVE
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· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

1314-62-1	divanadium pentaoxide
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

1314-62-1	divanadium pentaoxide	A3
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

divanadium pentaoxide

· **Hazard statements**

Fatal if inhaled.

(Contd. on page 13)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 12)

Suspected of causing genetic defects.

Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to the respiratory system and the respiratory tract through prolonged or repeated exposure. Route of exposure: Inhalation. May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

[In case of inadequate ventilation] wear respiratory protection.

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

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment is urgent (see on this label).

Get medical advice/attention if you feel unwell.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department.

· **Contact:** -

· **Date of preparation / last revision** 10/23/2025 / 3.0

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 14)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 10/23/2025

Trade name: Vanadium(V)oxide 10.0% in petrolatum

(Contd. of page 13)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Toxicity - Inhalation 2: Acute toxicity – Category 2
Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2
Carcinogenicity 2: Carcinogenicity – Category 2
Toxic to Reproduction 2: Reproductive toxicity – Category 2
Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1
· * **Data compared to the previous version altered.**

US