



Vanadium 1000 mg/Litre AAS in HNO<sub>3</sub>

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : **Vanadium** 1000 mg/Litre AAS in HNO<sub>3</sub>

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi-10002

INDIA

Telephone : +91 11 49404040

Email : <a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word

Warning skin irritation

Hazard statement(s)
H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

none

Statements

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 **Mixtures**

| Hazardous ingredients | according to Regulation | (EC) No 1272/2008 |
|-----------------------|-------------------------|-------------------|
| Component             |                         | Classification    |

| Component                      | , , , , , , , , , , , , , , , , , , ,  | Classification  | Concentration        |
|--------------------------------|--|---|----------------------|
| Nitric acid                    |  |   |                      |
| CAS-No.<br>EC-No.<br>Index-No. | 7697-37-2<br>231-714-2<br>007-004-00-1 | Ox. Liq. 2; Met. Corr. 1; Skin Corr. 1A; H272, H290, H314 Concentration limits:  >= 20 %: Skin Corr. 1A, H314; 5 - < 20 %: Skin Corr. 1B, H314; 65 - < 99 %: Ox. Liq. 3, H272; >= 99 %: Ox. Liq. 2, H272; 1 - < 3 %: Eye Irrit. 2A, H319; 3 - < 5 %: 1, H318; >= 1 %: Met. Corr. 1, H290; 1 - < 5 %: Skin Irrit. 2, H315; | >= 1 - < 3 %         |
| Vanadium pentoxide             |  |   |                      |
| CAS-No.<br>EC-No.<br>Index-No. | 1314-62-1<br>215-239-8<br>023-001-00-8 | Acute Tox. 4; Eye Dam. 1;<br>Muta. 2; Repr. 2; STOT SE 3;<br>STOT RE 1; Aquatic Chronic<br>2; H302, H332, H318, H341,   | >= 0.1 - < 0.25<br>% |

H361d, H335, H372, H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **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.

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

# In case of skin contact

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.

#### If swallowed

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

# **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

Nitrogen oxides (NOx)

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Non Combustible Liquids

# 7.3 Specific end use(s)

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

#### **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

Safety glasses with side-shields conforming to EN166 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**

Impervious 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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

| IIIIC | illiation on basic physic                          | ai and chemical pro                        |
|-------|--|--|
| a)    | Appearance   | Form: clear, liquid<br>Colour: light green |
| b)    | Odour  | No data available                          |
| c)    | Odour Threshold                                    | No data available                          |
| d)    | рН   | No data available                          |
| e)    | Melting point/freezing point                       | No data available                          |
| 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<br>flammability or<br>explosive limits | No data available                          |
| k)    | Vapour pressure                                    | No data available                          |
| l)    | Vapour density                                     | No data available                          |
| m)    | Relative density                                   | 1.017 g/cm3                                |
| 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                               | No data available                          |
| t)    | Oxidizing properties                               | 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

No data available

#### 10.5 Incompatible materials

Gives off hydrogen by reaction with metals.

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# 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

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Vanadium pentoxide)

#### 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**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 3264 IMDG: 3264 IATA: 3264

#### 14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid) IMDG:

IATA: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)

# 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

# 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

#### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

H272

# Full text of H-Statements referred to under sections 2 and 3.

May intensify fire; oxidizer.

| H290  | May be corrosive to metals.                                     |
|-------|---|
| H302  | Harmful if swallowed.   |
| H314  | Causes severe skin burns and eye damage.                        |
| H315  | Causes skin irritation.   |
| H318  | Causes serious eye damage.                                      |
| H319  | Causes serious eye irritation.                                  |
| H332  | Harmful if inhaled.   |
| H335  | May cause respiratory irritation.                               |
| H341  | Suspected of causing genetic defects.                           |
| H361d | Suspected of damaging the unborn child.                         |
| H372  | Causes damage to organs through prolonged or repeated exposure. |
| H411  | Toxic to aquatic life with long lasting effects.                |

# **Further information**

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.