

## Safety Data Sheet

### 1. Product and Company Identification

**Product Name** : VANADIUM OXIDE  
**Catalog Number** : VP-250  
**Company Information** : PREMIER Lab Supply, Inc.  
 691 NW Enterprise Drive  
 Port St Lucie, FL 34986  
 USA  
**Date Issued** : JULY 2014  
**Emergency Phone Number** : 772-873-1700  
**Business Phone Number** : 772-873-1700  
**Fax Number** : 772-873-1800

### 2. Hazard Identification

#### Emergency Overview:

#### Hazard Classification:

Category 2 : Skin Irritation  
 Category 2A : Eye Irritation  
 Category 3 : Specific target organ toxicity- single exposure

#### Safety Label Elements



#### Pictogram

#### Signal Word

Danger

#### Hazard Statements

H302 + H332 : Harmful if swallowed or if inhaled  
 H335 : May cause respiratory irritation  
 H341 : Suspected of causing genetic defects  
 H361 : Suspected of damaging fertility or unborn child  
 H372 : Causes damage to organs through prolonged exposure

#### Precautionary Statements

P260 : Do not breathe dust/fume/gas/mist/vapors/spray  
 P261 : Avoid breathing dust, fume, gas, mist  
 P301, P310 : IF SWALLOWED: Immediately call a POISON CENETR or doctor/physician  
 P304, P340 : IF INHALED: Remove victim to fresh air.  
 P305, P351, P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contacts if present and easy to do. Continue rinsing.

Category	HMIS Classification	NFPA Rating
Health Hazard	4	3
Fire/Flammability	0	0
Physical Hazard	1	-
Reactivity Hazard	-	1

### 3. Composition/Information on Ingredients

Ingredients	CAS Number	EC Number	Weight Percent
Vanadium (V) Pentoxide	1314-62-1	215-239-8	-

#### 4. First Aid Measures

**General Advice:**

Seek immediate medical advice with the copy of the label and MSDS. Move out of dangerous area.

**After Inhalation:**

Supply fresh air. If required, provide artificial respiration. Seek immediate medical advice.

**After Skin Contact:**

Wash with soap and water and rinse thoroughly. Seek immediate medical advice.

**After Eye Contact:**

Rinse opened eye for at least 15 minutes under running water. Seek immediate medical advice.

**After Swallowing:**

Do not induce vomiting. Seek immediate medical advice. Rinse mouth with water.

#### 5. Fire-Fighting Measures

**Suitable Extinguishing Agents:**

Use water spray, dry chemicals or carbon dioxide

**Protective Equipment:**

Wear self-contained respirator and fully protective impervious suit.

**Hazardous Combustion Products:**

Under Fire Conditions Form – Toxic metal oxide fume

#### 6. Accidental Release Measures

**Person Precautions:**

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

**Environmental Protection:**

Do not allow material to be released to the environment without proper governmental permits.

**Methods and Materials for Containment and Cleanup:**

Pick up and arrange disposal without creating dust. Keep in suitable closed container for disposal.

#### 7. Handling and Storage Measures

**Precautions for Safe Handling:**

Avoid contact with skin and eyes. Avoid dust and aerosol formation. Ensure good ventilation.

**Condition for Safe Storage:**

Store in cool, dry place in tightly closed containers.

#### 8. Exposure Controls and Personal Protection

Chemical	PEL	REL	TLV
Vanadium (V) Pentoxide	0.1 mg/mL	0.05 mg/mL	0.05 mg/mL

**Personal Protective Equipment:**

**Respiratory Protection:** For nuisance exposure use dust mask. Use masks and respirators tested and approved under appropriate government standards.

**Hand Protection:** Handle with gloves. Inspect gloves before use. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye Protection:** For eye protection use safety glasses or face shield. Use masks and respirators tested and approved under appropriate government standards.

**Skin and Body Protection:** The type of equipment must be selected according to the concentration and amount the dangerous substance at the specific workplace.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. Physical and Chemical Properties

<b>Appearance</b>	:	Powder
<b>Odor</b>	:	Odorless
<b>Odor Threshold</b>	:	No Data Available
<b>pH</b>	:	Not Applicable
<b>Melting Point/Freezing Point</b>	:	690 °C (1274 °F)
<b>Boiling Point</b>	:	1750 °C (3183 °F)
<b>Flash Point</b>	:	Not Applicable
<b>Evaporation Rate</b>	:	No Data Available
<b>Explosion Limits(Upper/Lower)</b>	:	No Data Available
<b>Vapor Pressure</b>	:	Not Applicable
<b>Vapor Density</b>	:	No Data Available
<b>Relative Density</b>	:	3.357 g/cm <sup>3</sup>
<b>Solubility</b>	:	8 g/L
<b>Partition Coefficient</b>	:	No Data Available
<b>Auto-Ignition Temperature</b>	:	No Data Available
<b>Decomposition Temperature</b>	:	No Data Available
<b>Viscosity</b>	:	No Data Available

## 10. Stability and Reactivity

<b>Reactivity</b>	:	No Data Available
<b>Chemical Stability</b>	:	Stable under recommended storage conditions
<b>Possibility of Hazardous Reactions</b>	:	No Data Available
<b>Condition to Avoid</b>	:	Decomposition will not occur if used/stored appropriately.
<b>Incompatible Materials</b>	:	Strong Acids
<b>Hazardous Decomposition Products</b>	:	No Data Available

## 11. Toxicological Information

Acute Toxicity:	Oral LD50	Dermal LD50	Other information of acute toxicity
Vanadium (V) Pentoxide	10 mg/kg	2500 mg/kg	Inhalation 6h 126 mg/mL

<b>Skin corrosion/irritation</b>	:	No Data Available
<b>Serious eye damage/eye irritation</b>	:	Risk of eye damage (Rabbit)
<b>Respiratory or skin sensitization</b>	:	No Data Available
<b>Germ Cell mutagenicity</b>	:	No Data Available
<b>Carcinogenicity</b>	IARC	: 2B – Group 2B: Possibly carcinogenic to humans No classification data of levels greater than or equal to 0.1% on carcinogenic properties of this material is available from the NTP, OSHA or ACGIH.
<b>Reproductive toxicity</b>	:	No Data Available
<b>Teratogenicity</b>	:	No Data Available
<b>Specific target organ toxicity – single exposure</b>	:	May cause respiratory irritation
<b>Specific target organ toxicity – repeated exposure</b>	:	Causes damage via prolonged exposure
<b>Aspiration Hazard</b>	:	No Data Available

**Synergistic Effects** : No Data Available  
**Additional Information** : RTECS: Not available

**12. Ecological Information**

**Toxicity** : Toxicity to fish LC50: 5.2 mg/L 96h  
**Persistence and Degradability** : No Data Available  
**Bioaccumulation potential** : No Data Available  
**Mobility in Soil** : No Data Available  
**Other Adverse effects** : No Data Available

**13. Disposal Considerations**

**Product** : Contact a licensed professional waste disposal service to dispose.  
**Contaminated packaging** : Dispose of as unused product

**14. Transportation Information**

**DOT** :  
UN number: 2862 Class: 6.1 Packing Group: III  
Proper shipping Name : Vanadium Pentoxide  
Reportable Quantity : 1000lbs  
Marine Pollutant : No  
Poison Inhalation Hazard : No

**IMDG**  
UN number: 2862 Class: 6.1 Packing Group: III EMS-No: F-A, S-A  
Proper shipping Name : Vanadium Pentoxide  
Marine Pollutant : No

**IATA**  
UN number: 2862 Class: 6.1 Packing Group: III  
Proper shipping Name : Vanadium Pentoxide

**15. Regulatory Information**

Chemical Name	SARA 302	SARA 313	SARA 311/312 Hazards
Vanadium (V) Pentoxide	YES: 1314-62-1	YES: 1314-62-1	Acute Health Hazard, Chronic Health Hazard

**Right to Know Act** :

Massachusetts	Pennsylvania	New Jersey	California
Vanadium Pentoxide	Vanadium (V) Pentoxide	Vanadium (V) Pentoxide	WARNING! Contains a chemical known to cause cancer Vanadium Pentoxide
CAS-No.1314-62-1	CAS-No.1314-62-1	CAS-No.1314-62-1	CAS-No.1314-62-1

**16. Other Information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with the Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.