

# MATERIAL SAFETY DATA SHEET

Vanadium Standard 1000 ppm

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Vanadium Standard 1000 ppm

Product Code: 9710

Material Uses:

Manufacturer: Science Stuff  
1104 Newport Ave

Austin, TX 78753

(512) 837-6020

Entry Date : 7/2/2013

Print Date: 7/2/2013

24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	3
Flammability:	0
Reactivity:	0

Hazard Rating:  
Least Slight Moderate High Extreme  
0 1 2 3 4  
NA=Not Applicable NE=Not Established

## SECTION 2 HAZARD IDENTIFICATION

May cause irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

## SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Nitric Acid	CAS# 7697-37-2	2 - 5%	W/W	OSHA TWA 2 ppm (5mg/mf), STEL 4 ppm (10mg/mf)
<input checked="" type="checkbox"/>	Vanadium Pentoxide	CAS#: 1314-62-1	<0.5%	W/W	OSHA PEL: 0.5 mg(V2O5)/M3
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

## SECTION 4 FIRST AID MEASURES

May cause irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

Vanadium Standard 1000 ppm

**SECTION 5 FIRE FIGHTING MEASURES**

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire

Fire / Explosion Hazards: Thermal decomposition produces toxic fumes.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

**SECTION 7 HANDLING AND STORAGE**

Keep container closed when not in use. Store at controlled room temperature. Do not breathe vapor. Do not get in eyes, on skin or on clothing. This product should only be used by persons trained in the safe handling of hazardous chemicals.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory Protection: None required

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Wear appropriate gloves to prevent skin exposure

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point:	~0°C	Percent Volatile by Volume:	>98%
Boiling Point:	~100°C	Evaporation Rate	0.36
Vapor Pressure:	18.51 mmHg	Evaporation Standard	Butylacetate =1
Vapor Density:	0.62 g/L	Auto Ignition Temp	Not Applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not Applicable
Appearance /Odors:	Clear yellow odorless liquid	Upper Flamm. Limit in Air	Not Applicable
Flash Point:	noncombustible		
Specific Gravity:	1.02		

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability: Stable

Conditions to Avoid: Extreme heat

Vanadium Standard 1000 ppm

Materials to Avoid: Oxidizers, reducing agents; metals

Hazardous Decomposition Products: Nitrogen oxides

Hazardous polymerization: Does not occur

Conditions to Avoid: None known

SECTION 11 Toxicological Information

SECTION 12 Ecological Information

SECTION 13 Disposal Considerations

SECTION 14 Transport Information

DOT Classification: UN3264, Corrosive Liquid, Acidic, Inorganic, n.o.s. (Nitric Acid), 8, PG III

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

SECTION 16 Additional Information

Conditions aggravated/Target organs: Persons with preexisting skin, eye, or respiratory disorders may be susceptible. Corrosive! Acute: Irritation and burns to skin, eyes, lungs, mucous membranes and GI tract. Vapor irritating to eyes and respiratory tract. May cause gastro-intestinal disturbances and lung irritation, chest pain and edema which may be fatal. May be fatal if swallowed. May cause lung damage.

Flammability

Health

Reactivity

Revisions

NFPA

2

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