



1. Product and Company Identification

Trade Name:	Vanadium Naphthenate Oxide
Chemical Formula:	C ₄₄ H ₂₈ O ₈ V
Recommended Use:	Scientific research and development
Manufacturer/Supplier:	LTS Research Laboratories, Inc.
Street:	2001 Oaks Pkwy
City:	Belmont
State:	North Carolina
Zip Code:	28012
Country:	USA
Tel #:	855-587-2436 / 855-lts-chem
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)

2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H301: Toxic if swallowed
H330: Fatal if inhaled
H315: Causes skin irritation
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H301+H331: Toxic if swallowed or if inhaled
H315: Causes skin irritation
H320: Causes eye irritation

Environmental hazards:

H410: Very toxic to aquatic life with long-lasting effects

Precautionary Statements:

P202: Do not handle until all safety precautions have been read and understood
P260: Do not breathe dust/fume/gas/mist/vapors/spray
P264: Wash face, hands, and any exposed skin thoroughly after handling
P270: Do not eat, drink, or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P281: Use personal protective equipment as required
P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P308+P313: IF exposed or concerned: Get medical advice/attention
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health:	3
Flammability:	0
Physical:	0

3. Composition

Chemical Family: Liquid
Additional Names: Naphthenic acids, vanadyl complexes

Vanadium Naphthenate Oxide (C44H28O8V):

Percentage: 100 wt%
CAS #: 68553-60-6
EC #: 271-395-7

4. First Aid Procedures

General Treatment: Seek medical attention if symptoms persist.
Special Treatment: None
Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Firefighting Measures

Flammability: Non-flammable

Extinguishing Media: Do not use water for metal fires – use CO₂, sand, extinguishing powder.
Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Wear a fully protective impervious suit. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up the spill using a high-efficiency particulate absolute (HEPA) air filter and place it in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions: Wash thoroughly after handling.
Storage Conditions: Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance: Do not use tobacco or food in the work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation: Provide sufficient ventilation to maintain concentration at or below the threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	0.05 mg/m ³
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	According to product specification
Form:	Liquid
Odor:	N/A
Water Solubility:	Insoluble in water
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	1.04 g/cm ³ (8.679 lbs/gal)
Molecular weight:	735.64 g/mol

10. Reactivity

Stability:	N/A
Reacts With:	N/A
Incompatible Conditions:	N/A
Hazardous Decomposition Products:	No dangerous decomposition products are known

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes irritation
Skin:	Causes irritation
Ingestion:	Very toxic if swallowed
Inhalation:	Very toxic if inhaled
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	N/A

12. Ecological Information

Aquatic Toxicity:	Very toxic for aquatic organisms
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted products or large quantities of them to reach ground water, water course, or sewage system. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Not hazardous for transportation. Hazardous as powder only.



Hazard Class: 6.1 Toxic substances
Packing Group: PG III
UN Number: UN2810
Proper Shipping Name: Toxic, liquids, organic, n.o.s. (Vanadium Naphthenate Oxide)

15. Regulatory Information

Sec 302 Extremely Hazardous: N/A
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The mandatory regulations mentioned aim to help the user fulfill his obligations regarding the use of hazardous products.

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