

# MATERIAL SAFETY DATA SHEET



Complies with U.S. OSHA  
E.C. Guideline 91/155/EEC:  
Revision: 4  
Last Revision: October 2011  
Replaces: October 2007

**EMERGENCY TELEPHONE NUMBERS:**  
NATIONAL RESPONSE CENTER: 1-800-424-8802  
CHEMTREC U.S. and CANADA: 1-800-424-9300  
CHEMTREC International: 1-202-483-7616 (Collect)

Users of this product are requested to study this data sheet to learn the product's characteristics so that the product can be used safely. If the material is resold, the purchaser should be furnished a copy of this data sheet and the information should be made available to all users.

## SECTION 1 Chemical Product and Company Identification

**Product Trade Name** **Vanadyl Oxalate**  
**Company Identification** Evraz Stratcor, Inc. Tel.: (501) 262-1270  
4285 Malvern Road Fax: (501) 262-2793  
Hot Springs, Arkansas 71901; USA  
**Inquiry Department** Evraz Stratcor, Inc.; Pittsburgh, PA; USA  
Tel.: 1-412-787-4500; www.evrazstratcor.com

## SECTION 2 Composition and Information on Ingredients

**Chemical Characterization:**  
**Chemical Description** **Vanadyl Oxalate Solution**  
**UN Number** **UN 3287 (No specific Listing.)**  
**DOT Guide** **151**  
**CAS No.** **14974-48-2**  
**EINECS No.** **239-052-6 (Oxalic Acid, Vanadium Salt)**

## SECTION 3 Hazards Identification

**Potential Hazards for Humans and Animals:**  
**Main Hazard** Ingestion; mild acid burns with skin contact.  
**Eye Contact** Burning, redness, pain, flood of tears..  
**Skin Contact** Irritation with burning, reddening, and itching.  
**Ingestion** Harmful if swallowed. Abdominal discomfort, vomiting, and spasm.

## SECTION 4 First-Aid Measures

**General Information:**  
**Skin** Wash with soap and water. See a physician if irritation continues.  
**Eyes** Flush with water 15 minutes. See an ophthalmologist.  
**Ingestion** Give large quantities of water. Call a physician.

## SECTION 5 Fire-Fighting Measures

**Suitable Extinguishing Media** Material does not burn.  
**Extinguishing Media Not to Be Used** None.  
**Special Exposure Hazards** Avoid actions which generate fume.  
**Special Protective Equipment for Fire Fighters** Use gloves, eye protection, and self-contained breathing apparatus to prevent contact.

## SECTION 6

### Accidental-Release Measures

<b>Personal Precautions</b>	Acid-resistant clothing and eye protection.
<b>Environmental Precautions</b>	Prevent entering sewage systems or surface water.
<b>Cleaning Methods</b>	Use absorbent compound.

## SECTION 7

### Handling and Storage

<b>Handling</b>	Use acid-resistant container. Handle with care.
<b>Storage</b>	Keep in cool, dry place.

## SECTION 8

### Exposure Controls and Personal Protection

<b>Occupational Exposure Limit</b>	Listed in OSHA 29 CFR 1910.1000, Table Z-1 (Air Contaminants): 0.05 mg/m <sup>3</sup> for V <sub>2</sub> O <sub>5</sub> respirable dust or fume (ACGIH TLV TWA)
<b>Personal Safety Equipment:</b>	
<b>Respiratory Protection</b>	Use respirators approved by NIOSH/MSHA.
<b>Hand Protection</b>	Use appropriate rubber gloves.
<b>Eye Protection</b>	Use approved eye protection.
<b>Skin Protection</b>	Wear acid-proof clothing.
<b>Personal Hygiene</b>	Wash or bathe with soap and water after handling and before eating, drinking, or smoking.

## SECTION 9

### Physical and Chemical Properties

This MSDS reflects available research data and is not a product- or quality-specification document.

<b>Appearance:</b>	
<b>Physical State</b>	Liquid.
<b>Form</b>	Solution.
<b>Flash Point</b>	Not applicable.
<b>Flammability</b>	Not applicable.
<b>Ignition Temperature</b>	Not applicable.
<b>Auto Flammability</b>	Not applicable.
<b>Oxidizing Properties</b>	May act as a catalyst in certain chemical environments.
<b>Explosive Properties</b>	None.
<b>Solubility in Water (20°C)</b>	22 g per 100 g.
<b>pH Value</b>	Less than 1.

## SECTION 10

### Stability and Reactivity

<b>Conditions to Avoid</b>	Stable.
<b>Incompatible Materials</b>	Generates carbon dioxide (CO <sub>2</sub> ) when exposed to alkaline products.
<b>Hazardous Decomposition</b>	Vanadium oxides, carbon dioxide.

## SECTION 11 Toxicological Information

<b>Acute Toxicity</b>	No toxicity data available.
<b>Irritation</b>	Eye and skin irritant. Hazardous and may cause severe burns.
<b>Chronic Toxicity</b>	No data available.
<b>Carcinogen Status:</b>	No data that indicates carcinogenicity.
<b>Mutagen Status</b>	No data available.
<b>Teratogen Status</b>	No data indicating any hazards.

## SECTION 12 Ecological Information

<b>Persistence and Degradability</b>	No data available.
<b>Bioaccumulation</b>	No data available.
<b>Aquatic Toxicity and Other Data Relating to Ecotoxicity</b>	No data available.

## SECTION 13 Disposal Considerations

<b>Product Recommendation</b>	Disposal should be made in compliance with Federal, state, and local environmental regulations.
<b>Packaging Disposal</b>	Disposal should be made in compliance with Federal, state, and local regulations.

## SECTION 14 Transport Information

<b>No specific listing for U.N., U.S. DOT, IMDG, or IATA.</b>	
<b>Recommended Proper Shipping Description</b>	Toxic Liquid, Inorganic, N.O.S. (Vanadyl Oxalate), 6.1, UN 3287, II

## SECTION 15 Regulatory Information

<b>Classification According to U.N. Guidelines</b>	Not listed.
<b>E.C. Danger Symbol</b>	
<b>R-Phrases</b>	Not listed.
<b>S-Phrases</b>	Not listed.
<b>TSCA Inventory</b>	Listed in EPA TSCA inventory.
<b>CERCLA RQ / EHS Components</b>	No RQ has been established.
<b>Section 311/12 Hazard Class - 40 CFR 370.2</b>	Acute: Yes. Chronic: Yes. Fire: No. Pressure: No. Reactivity: No. Review appropriate regulations for possible Tier II requirements.
<b>Section 313 – 40 CFR 372.65</b>	Reportable chemical categories: vanadium and vanadium compounds.
<b>Non-U.S. Requirements</b>	Refer to specific national guidelines.

## SECTION 16 Other Information

<b>Data Sheet Prepared by:</b>	 MICHAEL R. WOOLERY Director of Technology; Hot Springs, Arkansas; U.S.A.	10-1-11
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Evrax Stratcor, Inc. believes that the data on this sheet are correct as of the effective date and that the opinions given reflect those of qualified experts. Since Evrax Stratcor cannot control the product or its use, it is the user's responsibility to use the product safely. The data on this sheet apply only to products sold by corporate subsidiaries of Evrax Stratcor and may not apply to products sold by others.

### EVRAZ STRATCOR, Inc.

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