

Alpha Resources Inc.

## Safety Data Sheet (SDS)

Revision Date: April 29, 2015

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## Silver Vanadate

AEB1009, AEB1059

This product is intended for laboratory use.

Alpha Resources Inc. 3090 Johnson Rd. Stevensville, MI 49127 (269)465-5559

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word

Danger

## SECTION 2— HAZARDS IDENTIFICATION



Hazards Class: Acute toxicity, oral (Category 3), acute toxicity, inhalation (Category 3), Acute toxicity, dermal (Category 3), skin irritation (Category 2), eye irritation (Category 2A), and specific target organ toxicity single exposure, respiratory system (Category 3).

Hazard Statements: Toxic if swallowed, in contact with skin or if inhaled (H301+H311+H331), causes skin irritation (H315), causes serious eye damage (H319), and may cause respiratory irritation (H335).

Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapors/spray (P261), wash skin thoroughly after handling (P264), don't eat, drink or smoke when using this product (P270), use only outdoors or in a well-ventilated area (P271), wear protective gloves/eye protection/face protection (P280), specific measures, see supplemental first aid instructions on this label (P322), store locked up (P405), and dispose of contents/ container to an approved waste disposal plant (P501).

First Aid Statements: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician (P301+P310), IF ON SKIN: wash with plenty of soap and water (P302+P352), IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing (P305+P351+P338), Call a POISON CENTER or doctor/physician if you feel unwell (P312), rinse mouth (P330), if skin irritation occurs: get medical advice/attention (P332+P313), if eye irritation persists: get medical advice/attention (P337+P313), and remove/take off all contaminated clothing (P361).

## SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS #	Common %
Silver Vanadate	13497-94-4	<100
Zirconium Oxide	1314-23-4	<100

## SECTION 4— FIRST AID MEASURES

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). If breathing stops provide artificial respiration when authorized.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

**If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water. (P302+P352)

**If swallowed:** Rinse mouth. Call a physician if you feel unwell.

**Symptoms:** Inhalation can cause coughing/difficult breathing. Might cause dizziness and headaches. Ingestion can cause nausea or vomiting.

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## SECTION 5 — FIRE FIGHTING MEASURES

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**Extinguishing Media:** Alcohol resistant foam, carbon dioxide, dry chemical, or water spray.

**Fire Fighting Instructions:** Firefighters should self-contained breathing apparatus when necessary. Also, where suitable protective clothing and take the proper precautions.

**Special hazards arising from the substance:** Silver, silver oxides, vanadium, and vanadium oxides.

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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**Precautions:** Use appropriate personal protection equipment. This material should be swept up and placed into a sealed vessel for disposal. Wash the contaminated area once the sweeping has taken place. Ventilation must be available or respiratory might be only way to avoid over exposure.

**Environmental precautions:** Don't allow to enter water ways or drains.

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## SECTION 7 — HANDLING AND STORAGE

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**Handling:** This material is to be handled carefully with the appropriate personal protective equipment. Ensure adequate ventilation where necessary to work with material.

**Storage:** This product should be stored in a cool, dry place and kept sealed when not in use. Store locked up if possible.

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). An approved NIOSH respirator should be worn if exposure limits are excessive.**

Component	CAS#	Value	Limits	Basis
Silver Vanadate	13497-94-4	C	0.05 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
	Remarks	15 minute ceiling value		
		C	0.05 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		15 minute ceiling value		
Zirconium dioxide	1314-23-4	TWA	5 mg/m <sup>3</sup>	USA. Occupational exposure limits (OSHA) Table Z-1 limits for air contaminants
		TWA	5 mg/m <sup>3</sup>	USA. Occupational exposure limits (OSHA) Table Z-1 limits for air contaminants
		TWA	5 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		
		STEL	10mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		TWA	5mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		ST	10mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Yellow granules                                      Odorless                                      Relative density: N/A  
Melting Point: N/A                                      Boiling Point: N/A  
Soluble: N/A

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**SECTION 10 — STABILITY AND REACTIVITY**

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Stability: stable                                      Indefinite shelf life if stored correctly.

Avoid contact with strong oxidizing agents

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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**Acute Effects Data:** N/A

**Acute toxicity:** toxic if swallowed

**Serious eye damage/irritation:** causes serious eye irritation

**Chronic Effects:** N/A

**Carcinogenicity:** N/A

**Target Organs:** N/A

May cause argyria which is a grayish/blue discoloration of the skin and deep tissues from deposits of albuminate of silver.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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N/A

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Waste disposal should be done in compliance with existing federal, state and local environmental regulations.

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**SECTION 14 — TRANSPORT INFORMATION**

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**DOT (US)**

UN number: 3285 Class: 6.1 Packing group: III

Proper shipping name: Vanadium compound, n.o.s. (Silver vanadate 25% MIXTURE)

Reportable Quantity (RQ):

Marine pollutant: yes

Poison Inhalation Hazard: No

**IMDG**

UN number: 3285 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: VANADIUM COMPOUND, N.O.S. (Silver vanadate 25% MIXTURE)

Marine pollutant: yes

**IATA**

UN number: 3285 Class: 6.1 Packing group: III

Proper shipping name: Vanadium compound, n.o.s. (Silver vanadate 25% MIXTURE)

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**SECTION 15 — REGULATORY INFORMATION**

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SARA 302 Components: No chemicals in this material are subject to the reporting requirements of title III.

SARA 313 Components: Silver Vanadate is subject to reporting levels within this specification.

SARA 311/312 Hazards: N/A

Massachusetts RTK Components: Silver Vanadate CAS #13497-94-4

Pennsylvania RTK Components: Silver Vanadate CAS #13497-94-4

New Jersey RTK Components: Silver Vanadate CAS #13497-94-4

California Prop 65: No chemicals in this material known to cause cancer, birth defects, or any other reproductive harm.

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**SECTION 16 — OTHER INFORMATION**

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The data and information as stated was furnished by the manufacturer/vendor/supplier of this product. Alpha Resources Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

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