Alpha Resources Inc.

Safety Data Sheet (SDS)

Revision Date: April 29, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Cobaltous/ic Oxide Silvered Granular

AEB1000

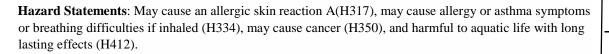
This product is intended for laboratory use.

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

Hazard Classification: Respiratory sensitization (Category 1), skin sensitization (Category 1), carcinogenicity (Category 1A), hazardous to the aquatic environment, acute toxicity (Category 1), and hazardous to the aquatic environment, chronic toxicity (Category 1).



Precautionary Statements: Obtain special instructions before use (P201), Don't handle until all safety precautions have been read and understood (P202), avoid breathing dust/fume/gas/mist/vapors/spray (P261), contaminated work clothing shouldn't be allowed out of workplace (P272), avoid release to the environment (P273), wear protective gloves/protective clothing/eye protection/face protection (P280), in case of inadequate ventilation wear respiratory protection (P285), wash contaminated clothing before resuse (P363), store locked up (P405), and dispose of contents/container to a licensed waste disposal company (P501).

First Aid Statements: IF ON SKIN: wash with plenty of soap and water (P302+P352), IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341), If exposed or concerned: get medical advice/attention (P308+P313), and if skin irritation or rash occurs: get medical advice/attention (P333+P313).

SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS#	Common %
Cobalt (II,III) Oxide	1308-06-1	<100
Silver	7440-22-4	

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 unconscious, check for breathing and apply artificial respiration if necessary. Seek medical attention.

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). Take off contaminated clothing.

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If swallowed: Never give anything by mouth to an unconscious person. If swallowed, rinse mouth with water if person is conscious. Seek medical attention.

Important symptoms: prolonged or repeated exposure may cause: fatigue, cardiac irregularities, convulsions, and vomiting.

SECTION 5 — FIRE FIGHTING MEASURES

Extinguishing Media: Dry chemical, water spray, alcohol-resistant foam, or carbon dioxide. This media would be for surrounding fires because this material will not burn.

Fire Fighting Instructions: Firefighters should wear positive pressure self-contained apparatus if necessary. Full fire retardant clothing might be necessary depending on size of fire.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Person Precautions: Adequate ventilation is necessary to prevent over-exposure. Avoid contact with skin and eyes. Avoid production of dust if possible. If dust is formed, don't breathe in and if necessary use a respirator to protect from exposure. Don't breathe in gas/fumes/vapor/spray. Move personnel away from area if possible to a safer zone.

Small or large spill: Pick up large pieces and place into sealable container. Clean in a way that keeps dust creation to a minimum. Clean area with wet cloth and dispose properly.

Environmental Precautions: Avoid letting this material enter water ways or drains. Also, don't let contaminate subsoil.

SECTION 7 — HANDLING AND STORAGE

Handling: Exhaust should be in place when working with this material. If not possible an approved respirator should be worn. Wash hands after touching material. Don't breathe dust or vapor. Wear suitable person protective equipment.

Store: In a cool dry place keep sealed.

<u>SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION</u>

Component	CAS#	Value	Limit	Basis
Tricobalt	1308-06-1	TWA	0.2mg/m^3	USA. ACGIH Threshold Limit
tetraoxide				Values (TLV)
	Remarks	Pulmonary function, Asthma, Myocardial		
		effects, and Confirmed animal carcinogen		
		with unknown relevance to humans varies		
		TWA	1mg/m^3	USA. OSHA Exposure limits
				Table Z-1 limits for air
				contaminants
		TWA	0.015mg/m^3	USA. NIOSH Recommended
				Exposure limits
		Potential Occupational Carcinogen		
		TWA	0.2mg/m^3	USA. ACGIH Threshold limit
				Values (TLV)
		Lung cancer and confirmed human carcinogen		

Component	CAS#	Value	Limits	Basis
Silver	7440-22-4	TWA	0.01 mg/m^3	USA. OSHA-table Z-1 limits for air contaminants
		TWA	0.01 mg/m^3	USA. OSHA-table Z-1 limits for air contaminants
		TWA	0.1 mg/m^3	USA. ACGIH Threshold limit values (TLV)
	Remarks	Argryia		
		TWA	0.01 mg/m^3	USA. OSHA-table Z-1 limits for air contaminants
		TWA	0.01 mg/m^3	
		TWA	0.01 mg/m^3	
		TWA	0.1 mg/m^3	USA. ACGIH Threshold limit values (TLV)
		Argryia		
		TWA	0.01 mg/m^3	USA. NIOSH Recommended exposure limits.

Personal protective equipment: Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). An approved NIOSH respirator must be work if exposure limits are excessive.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Grey granules Odorless Relative Density: N/A Soluble: N/A pH: N/A Melting Point: N/A

SECTION 10 — STABILITY AND REACTIVITY

Stability: Stable if stored or used at proper temperatures should never become unstable.

Incompatible materials: reducing agents

Conditions to Avoid: moisture

Hazardous decomposition product: Not determined

SECTION 11 — TOXICOLOGICAL INFORMATION

Silver

Acute Effects Data: LD50 Oral Rat male: >5000mg/kg

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.

Cobalt (II/III) Oxide

Toxicological Data: LD50 Oral Rat: 5000mg/kg LD50 Dermal Rat: 2000mg/kg

LD50 inhalation Rat 4hr: >5.06mg/L

Acute Effects: N/A

Skin corrosion/irritation: Skin, Rat: no skin irritation

Serious eye damage/irritation: Eyes, Rabbit: no eye irritation

Respiratory or skin sensitization: in vivo assay Mouse: doesn't cause skin sensitization **Germ cell mutagenicity:** In vitro assay mouse lymphoma cells: negative

Rat: negative

Carcinogenicity: IARC: 1-Group 1: Carcinogenic to humans (nickel monoxide)

NTP: known to be human carcinogen (nickel monoxide)

OSHA: no component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Effects due to ingestion may include: burning pain in mouth, throat and stomach.

Prolonged exposure may cause fatigue, cardiac irregularities, convulsions, and vomiting.

SECTION 12 — ECOLOGICAL INFORMATION

Data: Toxicity to algae EC50-Pseudokirchneriella subcapitata (green algae) 88mg/l (72hr)

Toxicity to Daphnia and other aquatic invertebrates EC50- Daphnia magna (water flea): 136mg/l (48hr)

Persistence and degradability: No data Bioaccumulative potential: No data

Mobility in soil: No data

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste disposal should be done in compliance with existing federal, state and local environmental regulations. Contact a licensed waste disposal company.

SECTION 14 — TRANSPORT INFORMATION

Not classified as a dangerous good for transport.

SECTION 15 — REGULATORY INFORMATION

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

SARA 313 Components: Copper Sulphate is subject to reporting levels within this specification.

SARA 311/312 Hazards: Acute health hazard and chronic health hazard. Massachusetts RTK Components: Copper Sulphate CAS#7758-98-7 Pennsylvania RTK Components: Copper Sulphate CAS#7758-98-7 New Jersey RTK Components: Copper Sulphate CAS#7758-98-7

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

SECTION 16 — OTHER INFORMATION

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.