Page E1 of E2

Chemical Product and Company Identification Section 1



L2S 3T4 Canada Tel: (800) 387-9393 **CHEMTREC 24 Hour Emergency USA** Phone Number (800) 424-9300

For laboratory and industrial use only. Not for drug, food or household use.

COBALT Product

Synonyms Cobalt Metal Pieces

Section 2 **Hazards Identification** Signal word: DANGER

Pictograms: GHS08 Target organs: Lungs



GHS Classification:

Skin sensitization (Category 1) Respiratory sensitization (Category 1) Aquatic chronic (Category 4)

GHS Label information: Hazard statement:

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H413: May cause long lasting harmful effects to aquatic life.

Precautionary statement:

P261: Avoid breathing dust.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: In case of inadequate ventilation, wear respiratory protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap

P333+P313: If skin irritation or rash occurs: Get medical attention. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P362+P364: Take off contaminated clothing and wash it before reuse

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / Information on Ingredients							
Chemical Name		CAS#	%	EINECS				
Cobalt metal		7440-48-4	100%	231-158-0				
Section 4	First Aid Measures							

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Sand, dry chemical, or CO2 should be used on surrounding fire. Do NOT use water on fire where molten metal is present.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Molten metals produce fume, vapor and/or dust that may be toxic and/or a respiratory irritant. Metal reacts with oxidizing agents. Fine powder forms flammable and explosive mixtures in air. Material in powder form capable of creating a dust explosion.

Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure Controls / Personal Protection							
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)				
	Cobalt, alloys	Not established	Not established	Not established				

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid. Gray, magnetic pieces

Odor: No odor

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: 1493°C (2720°F) Boiling point: 2723°C (3550°F) Flash point: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available

Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): Négligible Vapor density (Air = 1): Data not available Relative density (Specific gravity): 8.9 g/cc

Solubility(ies): Insoluble in water

Partition coefficient: Data not available Auto-ignition temperature: >200°C (392°F) Decomposition temperature: Data not available

Viscosity: Data not available Molecular formula: Co Molecular weight: 58.93

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures.

Incompatible materials: Strong oxidizers, strong acids, acetylene, hydrazinium nitrate, ammonium nitrate, bromine pentafluoride.

Hazardous decomposition products: Metallic oxides.

Section 11 **Toxicological Information**

Acute toxicity: Oral-rat LD50: >7000 mg/kg; Inhalation-rat LC50: >10 mg/L/1 hour

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC classified: Group 2B: Possibly carcinogenic to humans.

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.

CA Prop 65: 🕰 WARNING! : This product can expose you a chemical, Cobalt metall, which is known to the State of California to cause cancer, birth defects or other reproduc-

tive harm.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause cough, shortness of breath, sore throat, wheezing. Repeated or prolonged inhalation may cause asthma.

Ingestion: Ingestion may cause abdominal pain, vomiting Skin: Repeated or prolonged contact may cause skin sensitization.

Eyes: Contact with eyes causes redness.

Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: GF8750000

Ecological Information

Toxicity to fish: Brachydanio rerio (fish, fresh water), LC50 = >100 mg/L/96 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), NOEC = 3.2 mg/L/48 hours

Toxicity to algae: Selenastrum capricornutum (Algae), NOEC = 0.01 - 0.015 mg/L/72 hours

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No **Exceptions:** Not applicable 2016 ERG Guide # Not applicable

Section 15 **Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Cobalt	Listed	Not listed	D001	Listed	Not listed	⚠ WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

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