

SECTION 1 : Identification of the substance/preparation and of the company / undertaking

(a) GHS product identifier

Vitex - Alloy (All Types)

(e) Emergency phone number

CHEMTRAC 1-800-424-9300

(b) Other means of identification

NA

(c) Recommended use of the chemical and restrictions on use

For professional dental applications.

(d) Supplier's details

Garreco, LLC.
430 Hiram Road
Heber Springs, AR 72543
Phone: 1-800-334-1443

SECTION 2: Hazards identification

(a) GHS classification of the substance/mixture

Substance Name
Cobalt Based Alloy

(b) Label Elements

Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause long lasting harmful effects to aquatic life.
Very toxic to aquatic life.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
Avoid release to the environment.

Response

IF ON SKIN: Wash with plenty of water. If skin reaction occurs, contact a physician. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms:
Call a poison center.
Collect spillage.

Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Hazard Symbol(s)

Environment
Health Hazard

Signal Word(s)

Danger

(c) Other hazards which do not result in classification

NONE

SECTION 3: Composition/information on ingredients

(a) Chemical(s) Identity:

(b) Common Name:

1. Cobalt
2. Chromium
3. Molybdenum
4. Iron

(c) CAS No.

- 7440-48-4
- 7440-47-3
- 7439-98-7
- 1309-37-1

Mixture:

Concentration (Percentage)

- 60.0%
- 30.0%
- 7.0%
- 4.0%

SECTION 4: First-aid measures**(a) Description of first aid measures:**

IF ON SKIN: Vacuum off excess dust. Wash well with soap and water.

IF INHALED: Remove to fresh air. Get medical attention.

IF SWALLOWED: Seek medical attention if large quantities of material have been ingested.

IF IN EYES: Flush well with running water to remove particulate. Get medical attention.

(b) Most important symptoms and effects, both acute and delayed:

Skin sensitization, pulmonary sensitization, increased lung cancer risk, and pneumoconiosis.

(c) Indication of any immediate medical attention and special treatment needed:

Irritated skin or lungs.

SECTION 5: Fire-fighting measures**(a) Suitable extinguishing media:**

Dry chemical or dry sand.

(b) Special hazards arising from the chemical or mixture:

Fire and explosion hazards exist when dust particles are exposed to heat. Molten metal may react violently with water.

Under fire conditions, hazardous fumes will be present.

(c) Special protective equipment and precautions for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn.

SECTION 6: Accidental release measures**(a) Personal precautions, protective equipment and emergency procedures:**

Protective clothing should be worn in clean up operations.

(b) Environmental precautions:

Avoid release to the environment.

(c) Methods and material for containment and cleaning up:

Collect spillage, dust should be vacuumed or swept wet to keep airborne concentrations minimal.

SECTION 7: Handling and storage**(a) Precautions for safe handling:**

Wash hands with soap and water before eating, drinking, or smoking. Provide good ventilation in process area.

(b) Conditions for safe storage, including any incompatibilities:

Keep only in the original container in a cool, well ventilated area. Keep closed when not in use. Avoid strong bases, acids, sources of ignition, or water.

SECTION 8: Exposure controls/Personal protection**(a) Control parameters:**

| Chemical | ACGIH | OSHA |
|---------------|-----------------------|---------|
| | TLV | PEL TWA |
| 1. Cobalt | 0.1 mg/m ³ | |
| 2. Chromium | 0.5 mg/m ³ | |
| 3. Molybdenum | 10 mg/m ³ | |
| 4. Iron | 5 mg/m ³ | |

(b) Appropriate Engineering Controls:

Provide good ventilation in process area.

(c) Individual protection measures:

Safety glasses, impervious gloves, approved respirator if there is a risk of exposure at levels exceeding exposure limits.

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| | |
|---|-------------------------------|
| (a) Appearance: | Solid metallic platinum color |
| (b) Odor: | Odorless |
| (c) Odor threshold: | NA |
| (d) pH: | NA |
| (e) Melting point / freezing point: | 1,376°C |
| (f) Initial boiling point and boiling range: | NA |
| (g) Flash point: | NA |
| (h) Evaporation rate (BuAc=1): | ND |
| (i) Flammability: | Not highly flammable. |
| (j) Upper/lower flammability or explosive limits: | NA |
| (k) Vapor Pressure: | NA |
| (l) Vapor density: | ND |
| (m) Relative density: | NA |
| (n) Solubility: | Insoluble at room temp |
| (o) Partition coefficient: n-octanol/water: | ND |
| (p) Auto-ignition temperature: | ND |
| (q) Decomposition temperature: | ND |
| (r) Viscosity: | ND |

SECTION 10: Stability and reactivity

| | |
|---|--|
| (a) Reactivity: | NA |
| (b) Chemical stability: | Stable under normal conditions. |
| (c) Possibility of hazardous reactions: | May react with strong bases, acids, and oxidizers. |
| (d) Conditions to avoid: | Water, petroleum products, strong acids, bases, and oxidizers. |
| (f) Hazardous decomposition products: | Hazardous fumes. |

SECTION 11: Toxicological information

| | |
|-----------------------------------|--|
| Acute toxicity | ND |
| Skin corrosion/irritation | May cause skin irritation or allergy. |
| Serious Eye Damage / Irritation | May cause mild eye irritation. |
| Respiratory or skin sensitization | May cause sensitization and increased risk of lung cancer. |
| Germ cell mutagenicity | Possible mutagenicity. |
| Carcinogenicity | Chromium may increase the risk of lung cancer. |
| Reproductive toxicity | ND |
| STOT-single exposure | ND |
| STOT-repeated exposure | ND |
| Aspiration Hazard | ND |

| | |
|--|--|
| (a) Exposure route: | Eyes, skin and lungs. |
| (b) Symptoms related to the physical, chemical and toxicological characteristics: | Irritation, dermatitis, pulmonary sensitization, and pneumoconiosis. |
| (c) Delayed and immediate effects and also chronic effects from short and long tem exposure: | Irritation, dermatitis, pulmonary sensitization, and pneumoconiosis. |
| (d) Numerical measures of toxicity: | NA |

SECTION 12: Ecological information

| | |
|------------------------------------|-----------------------------|
| (a) Ecotoxicity: | Very toxic to aquatic life. |
| (b) Persistence and degradability: | Biodegradable. |
| (c) Bioaccumulative potential | ND |
| (d) Mobility in soil: | ND |
| (e) Other adverse effects: | ND |

SECTION 13: Disposal considerations**Product:****Recommendation**

Dispose of contents in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

(a) UN Number Not regulated
(b) UN Proper shipping name NA
(c) Transport hazard class(es) NA
(d) Packing Group NA
(e) Environmental hazards NA
(f) Transport in bulk NA
(g) Other Information NA

SECTION 15: Regulatory information

SARA Reporting Requirements: None
SARA Threshold Planning Quantity: NA
TSCA Inventory Status: Listed on the TSCA inventory.
Other Federal Requirements: NA
Other Canadian Regulations: Listed on the DSL inventory.
State Regulatory Information: NA

SECTION 16: Other information

PREPARED BY: Kathryn Harris
GAR QMS SDS REFERENCE: A359

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:
Health 1
Flammability 0
Reactivity 0
Other None

REVISION NUMBER: 150810

CHANGES FROM PREVIOUS VERSION: Initial Version

ABBREVIATIONS

| | |
|--|--|
| NA Not Applicable | LD Lethal Dose |
| ND Not Determined | TC Toxic Concentration |
| NE Not Established | TD Toxic Dose |
| ppm parts per million | BOD Biological Oxygen Demand |
| G Gallon | COD Chemical Oxygen Demand |
| mg Milligram | Lo Lowest |
| L Liter | ThOD Theoretical Oxygen Demand |
| gm Gram | TLm Threshold Limit |
| mol Mole | IC Inhibitory Concentration |
| kg Kilogram | DOC Dissolved Organic Carbon |
| µ Micro | H Hours |
| mm Millimeter | M Months |
| p Pico | D Days |
| Pa Pascals | Y Years |
| c cent | W Weeks |
| LC Lethal Concentration | NOEL No Observed Effect Level |
| ACGIH American Conference of Governmental Industrial Hygienist | CPR Controlled Product's Regulation |
| DSL Canadian Domestic Substances List | PEL Permissible Exposure Limit |
| NDSL Canadian Non-domestic Substance List | TLV Threshold Limit Value |
| IARC International Agency for Research for Cancer | NOAEL No Observed Adverse Effect Level |
| OSHA Occupational Safety and Health Administration | |

Safety Data Sheet

Form No. A360

Date Prepared: 8/10/2015

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OF CHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED.

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