

**Safety Data Sheet**

**Section 1: Identification**

- 1.1 Product identifier**  
Product Name : **Nickel Alloy Wire (All Grades)**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Identified Uses : Industrial and commercial
- 1.3 Details of the supplier of the safety data sheet**  
Manufacturer : Central Wire Industries Ltd.  
1 North Street  
Perth, Ontario K7H 2S2 Canada  
<http://www.centralwire.com>
- Manufacturing Locations  
US Locations: Dumas, AR; Fond du Lac, WI; Houston, TX; Lancaster, SC; Milton, FL; Perris, CA, Union, IL  
Canada Locations: Erin, Ontario; Perth, Ontario  
United Kingdom Location: Rotherham, South Yorkshire, England
- 1.4 Emergency telephone number**  
Manufacturer : 613-326-3006

**Section 2: Hazard Identification**

- 2.1 Classification of the substance or mixture**  
**GHS Classification in accordance with OSHA 29 CFR 1910.1200 HCS**
- OSHA HCS 2012 : This product is generally an article and is considered non-hazardous in its solid form, but is regulated under OSHA for the release of dust and fumes during mechanical processing operations.
- OSHA Hazards : Acute Toxicant  
Irritant  
Target Organ Toxicity – Lungs, Central Nervous System  
Carcinogen Reproductive Toxicant Mutagen  
Skin/Respiratory Sensitizer
- GHS Classification : Acute Toxicity – Category 3                      Eye Damage/Irritation – Category 2B  
Respiratory Sensitizer – Category 1                      Skin Sensitizer – Category 1  
Germ Cell Mutagenicity – Category 2                      Carcinogenicity – Category 1B  
Toxic to Reproduction – Category 1A
- Specific Target Organ Toxicity (Repeated Exposure) – Category 1  
Hazardous to the Aquatic Environment – Acute Hazard – Category 1  
Hazardous to the Aquatic Environment – Chronic Hazard – Category 2

- 2.2 Label Elements – OSHA HCS 2012**  
**Pictogram(s)**



**Signal Word:** DANGER

**Hazard statements:** There are no health hazards from nickel alloy wire in solid form. Exposure to dust and/or fumes from processing such as burning, welding, sawing, brazing and grinding may cause serious health effect.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Suspected of causing cancer.  
Causes damage to organs – lungs via inhalation.  
Causes damage to organs – lungs through prolonged or repeated exposure via inhalation.  
May form combustible dust concentrations in air.

**Precautionary statements:**

**Prevention** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dusts, fumes and gases.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves – work gloves and eye/face protection – safety glasses or goggles.  
In case of inadequate ventilation, wear respiratory protection.

**Response** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**Storage/Disposal** Store away from strong acids, oxidizes and alkalis.  
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.  
Refer to manufacturer/supplier for information on recovery/recycling.

**2.3 Other information**

**NFPA** Health = 1, Flammability = 0, Special Information = None  
**HMIS** Health = 1\*, Flammability = 0, Reactivity = 0, PPE = E  
\* Chronic Health Hazard  
E = Safety glasses, gloves and respirator if above exposure levels

**Section 3 - Composition/Information on Ingredients**

**Mixtures**

Nickel alloy in its solid state is not considered hazardous. However, operations such as burning, welding, sawing, brazing or grinding may release dust and/or fumes, which may present health hazards. These elements may appear in some or various combinations in any particular grade of nickel alloy.

Composition		
Name of substance	Identifier	Percentage (%)
Aluminum	CAS: 7429-90-5	< 4
Chromium	CAS: 7440-47-3	< 25
Cobalt	CAS: 7440-48-4	<40
Copper	CAS: 7440-50-8	< 35
Iron	CAS: 7439-89-6	< 70
Manganese	CAS: 7439-96-5	< 6
Molybdenum	CAS: 7439-98-7	< 34
Nickel	CAS: 7440-02-0	< 99

Niobium (Columbium)	CAS: 7440-03-1	< 6
Silicon	CAS: 7440-21-3	< 3
Titanium	CAS: 7440-32-6	< 4
Tungsten	CAS: 7440-33-7	< 5

## Section 4: First-Aid Measures

### Description of first aid measures

- Inhalation** • IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin** • If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- Eye** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion** • Low hazard for usual industrial or commercial handling. Get medical attention if symptoms occur.

### Most important symptoms and effects, both acute and delayed

- Cough and breathlessness. Allergic reaction.

## Section 5: Fire-Fighting Measures

### 5.1 Extinguishing Media

Suitable extinguishing media: Product as supplied in solid form is non-combustible. Use firefighting measures for surrounding materials. Use Class D fire extinguisher for fires involving metal dusts. Do not use water on product if it has become molten.

### 5.2 Special hazards arising from the substance or mixture

Vapors and fumes containing metals (or their oxides) may be formed at temperature above the melting point. Exposure to unknown concentrations of vapors and fumes require the wearing of a pressure-demand airline respirator or pressure-demand self-contained breathing apparatus (SCBA).

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Product as supplied in solid form is not classified as a U.S. Department of Transportation hazardous material.

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions No data available

Emergency

Procedures

Solid form: Not applicable. In dusty environment, ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Clean up using methods which avoid dust generation. During cleanup avoid inhalation and skin and eye contact. Provide local exhaust or dilution ventilation as required.

### 6.2 Environmental precautions

No data available

### 6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Vacuum type equipment of effective for control and cleanup. Vacuum and ventilation equipment should have HEPA type filters where appropriate. Material should be swept or vacuumed and placed into appropriate disposable containers. Keep in suitable, closed containers for disposal.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

Stable under normal temperature and pressure. Do not breathe (dust or fumes). Do not use in areas without adequate ventilation. Do not use sparking tools. Keep away from heat and ignition sources – No Smoking. Use good safety and industrial hygiene practices.

### 7.2 Conditions for safe storage, including any incompatibilities

Store away from strong acids and oxidizers.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

**Exposure Limits/Guidelines** • No data available on product. Individual elements may be emitted during processing.

	ACGIH TLV	NIOSH REL	OSHA PEL
Aluminum (7429-90-5)	1 mg/m <sup>3</sup> (respirable dust) 5 mg/m <sup>3</sup> (welding fume)	10 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (respirable dust)	15 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (respirable fraction)
Silicon (7440-21-3)	10 mg/m <sup>3</sup> (total dust)	10 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (respirable dust)	15 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (respirable fraction)
Iron (7439-89-6)	5 mg/m <sup>3</sup> (iron oxide – dust & fume)	5 mg/m <sup>3</sup> (iron oxide – dust & fume)	10 mg/m <sup>3</sup> (iron oxide – fume)
Tungsten (7440-33-7)	5 mg/m <sup>3</sup> , 10 mg/m <sup>3</sup> STEL insoluble 1 mg/m <sup>3</sup> , 3 mg/m <sup>3</sup> STEL soluble	5 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (respirable fraction)
Manganese (7439-96-5)	0.02 mg/m <sup>3</sup> (respirable fraction); 0.1 mg/m <sup>3</sup> (inhalable fraction)	1 mg/m <sup>3</sup> (fume)	5 mg/m <sup>3</sup> (as fume & Mn compounds)
Molybdenum (7439-98-7)	10 mg/m <sup>3</sup> (inhalable fraction); 3 mg/m <sup>3</sup> (respirable fraction)	Not established	Not established
Chromium (7440-47-3)	0.5 mg/m <sup>3</sup> [metal and Cr (III)]; 0.05 mg/m <sup>3</sup> , Cr (VI) water soluble compounds; 0.01 mg/m <sup>3</sup> , Cr (VI) insoluble compounds;	0.5 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> (metal & insoluble salt) 0.5 mg/m <sup>3</sup> [Cr (III)] 5 µg/m <sup>3</sup> [Cr (VI)]
Cobalt (7440-48-4)	0.02 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup> (dust & fume)	0.1 mg/m <sup>3</sup> (dust & fume)
Copper (7440-50-8)	0.1 mg/m <sup>3</sup> (fume) 1.0 mg/m <sup>3</sup> (dust & mist)	1.0 mg/m <sup>3</sup> (dust & mist)	0.1 mg/m <sup>3</sup> (fume) 1.0 mg/m <sup>3</sup> (dust & mist)
Nickel (7440-02-0)	1.5 mg/m <sup>3</sup> (inhalable fraction)	0.015 mg/m <sup>3</sup> (as metal and soluble & insoluble compounds)	1 mg/m <sup>3</sup> (as metal and insoluble compound)
<p>1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentration unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure which should not be exceeded at any time during a workday.</p> <p>2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentration unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minute) for only four times throughout the day with at least one hour between exposures. ACGIH TLVs are for guideline use purposes and are not legal regulatory standards for compliance purposes.</p> <p>3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL) – Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992).</p>			

### Exposure controls

#### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use only appropriately classified electrical equipment.

#### Personal Protective Equipment

##### Pictograms



##### Respiratory

- Use of a NIOSH/MSHA approved dust respirator is recommended where airborne dust levels exceed appropriate PELs and TLVs.

##### Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

- Hands**
  - Wear protective gloves - suitable for protection against physical injury and skin contact during handling and processing.
- Skin/Body**
  - Wear protective clothing - such as long sleeves and or coveralls during processing.
- General Industrial Hygiene Considerations**
  - Practice good housekeeping and avoid creating/breathing dust. Do not allow dust to collect. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Provide readily accessible eyewash stations.
- Environmental Exposure Controls**
  - No data available

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Appearance and Odor	:	Metallic Silver
Boiling Point	:	Not available
Melting Point	:	1370°C - 1590°C (2500°F – 2900°F)
Flash Point	:	Non-flammable
pH	:	Not applicable
Density	:	8.03 – 8.86 gr/cm <sup>3</sup> (0.29 – 0.32 lb/in <sup>3</sup> )
Auto-Ignition Temperature	:	Not applicable
Viscosity	:	Not applicable
Vapor Pressure	:	Not applicable
Vapor Density (air = 1)	:	Not applicable
% Volatile, by volume	:	None
Solubility in Water	:	Insoluble
Evaporation Rate (butyl acetate = 1)	:	<1
Other Physical and Chemical Data	:	None

## Section 10: Stability and Reactivity

### Reactivity

- No dangerous reaction known under conditions of normal use.

### Chemical stability

- Stable under recommended storage conditions.

### Possibility of hazardous reactions

- No data available.

### Conditions to avoid

- Incompatible materials.

### Incompatible materials

- Oxidizing agents.

### Hazardous decomposition products

- Hazardous decomposition may occur during certain operations such as welding, burning, melting or hot rolling, generating hazardous metal fumes.

## Section 11 - Toxicological Information

### Information on toxicological effects

Toxicological impacts expected to be minimal for products in purchased form. Individual component information is provided below if available.

### Components

Aluminum ( < 4%)	7429-90-5	<b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 206 mg/m <sup>3</sup> 5 Hour(s) 30 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> <b>Fibrosis (interstitial); Endocrine:Hypoglycemia; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)</b>
Chromium ( < 25%)	7440-47-3	<b>Tumorigen / Carcinogen:</b> Implant-Rat TDLo • 1200 µg/kg 6 Week(s)-Intermittent; <i>Tumorigenic:</i> <b>Equivocal tumorigenic agent by RTECS criteria; Blood:Lymphoma, including Hodgkin's disease; Tumorigenic:Tumors at site of application;</b> Intravenous-Rat TDLo • 2160 µg/kg 6 Week(s)-Intermittent; <i>Tumorigenic:</i> <b>Equivocal tumorigenic agent by RTECS criteria; Gastrointestinal:Tumors; Blood:Lymphoma, including Hodgkin's disease</b>
Cobalt ( < 40%)	7440-48-4	<b>Acute Toxicity:</b> the toxicological results are inconclusive. Oral: exposure range: LD <sub>50</sub> : 42.4 mg cobalt/kg as cobalt chloride to 317 mg cobalt/kg as cobalt carbonate. Inhalation: exposure range: 0.015-0.13 mg cobalt/m <sup>3</sup> may cause effects in the respiratory tract. LC <sub>50</sub> = 165 mg cobalt/m <sup>3</sup> (30 minute inhalation exposure in rats as cobalt hydrocarbonyl. <b>Sensitization respiratory tract:</b> may result in sensitization of the respiratory tract or the immune system which may result in asthmatic attacks following inhalation of cobalt in sensitized individuals. <b>Skin sensitization:</b> may cause dermatitis.
Copper ( < 40%)	7440-50-8	<b>Acute Toxicity:</b> Ingestion/Oral-Mouse LD50 • 413 mg/kg; Ingestion/Oral-Human TDLo • 120 µg/kg; <i>Gastrointestinal:</i> <b>Nausea or vomiting</b>
Manganese ( < 6%)	7439-96-5	<b>Irritation:</b> Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation; <b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 3709 mg/m <sup>3</sup> 6 Hour(s) 13 Week(s)-Intermittent; <i>Brain and Coverings:</i> <b>Other degenerative changes; Behavioral:Changes in motor activity (specific assay); Lungs, Thorax, or Respiration:Other changes;</b> Inhalation-Rat TClO • 0.3 mg/m <sup>3</sup> 5 Hour(s) 26 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> <b>Fibrosis (interstitial); Immunological Including Allergic:Decrease in cellular immune response</b>
Molybdenum ( < 20%)	7439-98-7	<b>Multi-dose Toxicity:</b> Ingestion/Oral-Rat TDLo • 7 mg/kg 2 Week(s)-Intermittent; <i>Liver:</i> <b>Other changes; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Other oxidoreductases</b>
Nickel ( < 90%)	7440-02-0	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LDLo • 500 mg/kg; <i>Gastrointestinal:Other changes;</i> Inhalation-Mouse TClO • 10 mg/m <sup>3</sup> 2 Hour(s); <i>Immunological Including Allergic:Decrease in cellular immune response;</i> <b>Multi-dose Toxicity:</b> Inhalation-Rabbit TClO • 130 µg/m <sup>3</sup> 6 Hour(s) 35 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport;</i> Inhalation-Rat TClO • 350 mg/m <sup>3</sup> 2 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Blood:Changes in erythrocyte (RBC) count; Related to Chronic Data:Death in the Other Multiple Dose data type field; Tumorigen / Carcinogen:</i> Inhalation-Guinea Pig TClO • 15 mg/m <sup>3</sup> 91 Week(s)-Intermittent; <i>Tumorigenic:</i> <b>Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Lungs, Thorax, or Respiration: Bronchiogenic carcinoma;</b> Intramuscular-Rat TDLo • 56 mg/kg; <i>Tumorigenic:</i> <b>Carcinogenic by RTECS criteria; Musculoskeletal:Tumors; Tumorigenic: Tumors at site of application;</b> Subcutaneous-Rat TDLo • 3000 mg/kg 6 Week(s)-Intermittent; <i>Tumorigenic:</i> <b>Equivocal tumorigenic agent by RTECS criteria; Skin and Appendages:Other:Tumors; Tumorigenic:Tumors at site of application</b>
Silicon ( < 4.5%)	7440-21-3	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3160 mg/kg; <b>Irritation:</b> Eye-Rabbit • 3 mg • Mild irritation
Tungsten ( < 5%)	7440-33-7	<b>Irritation:</b> Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation

#### Target organs

- Skin/Dermal, Lungs, Central Nervous System (CNS), Liver/Hepatotoxin, Kidney/Nephrotoxin, Metal Fume Fever, Nasal Cavity

#### Route(s) of entry/exposure

- Dermal contact with and/or inhalation of dust or fumes during welding, cutting, grinding, burning, and other operations. Overexposure to dusts and/or fume generated during processing can pose health hazards as defined below:

#### Medical conditions aggravated by exposure

- May aggravate asthma or other respiratory disorders. May aggravate skin disorders.

#### Potential Health Effects

##### Inhalation

Acute (immediate)

Chronic (delayed)

- May cause respiratory irritation. May cause sensitization. May cause metal fume fever.
- Prolonged inhalation of dust or fume may cause lung, central nervous system, liver, kidney and nasal cavity damage.

##### Skin

Acute (immediate)

Chronic (delayed)

- Causes skin irritation. May cause skin sensitization. Symptoms include redness, and skin rash.
- Repeated and prolonged exposure may cause irritation. Repeated and prolonged exposure may cause sensitization.

**Eye**

Acute (immediate)

- Exposure to dust and fumes may cause irritation. Exposure to fumes and dusts may cause sensitization and conjunctivitis.

Chronic (delayed)

- Repeated and prolonged exposure to dust and fumes may cause irritation. Repeated and prolonged exposure to dusts and fumes may cause sensitization and conjunctivitis.

**Ingestion**

Acute (immediate)

- Low hazard for usual industrial or commercial handling. Gastrointestinal disturbances including nausea and vomiting may result from ingestion of dusts.

Chronic (delayed)

- Low hazard for usual industrial or commercial handling. Repeated and prolonged exposure may cause gastrointestinal disturbances including nausea and vomiting.

**Carcinogenic Effects**

- No carcinogenic effects resulting from exposure to nickel alloys have been reported, either in epidemiological studies or in tests with animals. Nickel alloys, as dusts and fumes, are classified as a carcinogen.

<b>Carcinogenic Effects</b>			
	<b>CAS</b>	<b>IARC</b>	<b>NTP</b>
Nickel	7440-02-0	Group 2B - Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Nickel as Nickel Compounds	NDA	Group 1 - Carcinogenic	Known Human Carcinogen
Chromium	7440-47-3	Group 3 - Not classifiable	Not listed
Cobalt	7440-02-0	Group 2B - Possible Carcinogen	Not listed

**Section 12 - Ecological Information****Toxicity**

- Non-hazardous. Metallic nickel alloys are solid, compact and not soluble in water.

**Persistence and degradability**

- No data available

**Bioaccumulative potential**

- No data available

**Mobility in Soil**

- No data available

**Section 13 - Disposal Considerations****Waste treatment methods****Product waste**

- Product as shipped is not considered hazardous and should be recycled. Product dusts from processing may be classified as hazardous waste, as defined in 40 CFR 261 as well as state and/or local regulation. Solid waste generated from product processing should be classified by a competent environmental professional and disposed, processed or recycled in accordance with federal, state and local regulation.

**Packaging waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Section 14 - Transport Information****Component Marine Pollutants**

This product contains one or more of the following chemicals required by U.S. DOT to be identified as marine pollutants.

<b>Component</b>	<b>CAS No.</b>	
Copper	7440-50-8	DOT regulated severe marine pollutant (powder)

DOT Information

Shipping Name : Not Regulated

IATA Information

Shipping Name : Not Regulated

ICAO Information

Shipping Name : Not Regulated

IMDG Information

Shipping Name : Not Regulated

**Section 15 - Regulatory Information**

**NOTE:** The regulatory information contained in this Safety Data Sheet (SDS) is not intended to be comprehensive. Consult country, federal, state and local laws, rule and regulations before use.

California Proposition 65: This product contains chemicals (nickel) known to the State of California to cause cancer.  
Pennsylvania Hazardous Substance List: Copper, Manganese, Nickel, Phosphorus, Silicon, Tin, Iron oxide dust and Zinc.

New Jersey Hazardous Substance List: Copper, Manganese, Nickel, Phosphorus, Silicon, Tin, Iron oxide dust and Zinc.

Massachusetts Substance List: Copper, Manganese, Nickel, Phosphorus, Silicon, Tin, Iron oxide dust and Zinc.

**The Resource Conservation and Recovery Act (RCRA)**

Product is NOT a Hazardous Waste when disposed.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)**

US EPA allows a reporting exception for massive forms of certain solid metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium and zinc) when diameter of the released metal equals or exceeds 100 micrometers (0.004 inches) (50 FR 13461, April 4, 1985). The Agency deliberately set the cutoff size 10 times larger than the maximum size considered by EPA to be respirable dust to ensure that the government would be notified of releases containing small, inhalable particles of metals.

**Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III**

Section 311/312 HAZARD CATEGORIES: Immediate Health Effect (acute), Delayed Health Effect (chronic)

Section 313 Supplier Notification

This product contains EPCRA Section 313 chemicals subject to the reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372) as indicated below.

Component	CAS No.	Concentration (%wt)
Copper	7440-50-8	See Section 3
Manganese	7439-96-5	See Section 3
Nickel	7440-02-0	See Section 3
Phosphorus	7723-14-0	See Section 3
Zinc	7440-66-6	See Section 3

**Component Analysis – WHMIS IDL**

The following components are identified under the Canadian Hazardous Product Act Ingredient Disclosure Act List:

Component	CAS No.	Minimum Concentration (%wt)
Copper	7440-50-8	1%
Manganese	7439-96-5	1%
Nickel	7440-02-0	0.1%
Phosphorus	7723-14-0	1%
Zinc	7440-66-6	1%
Iron	7439-89-6	1%
Silicon	7440-21-3	1%
Tin	7440-31-5	1%

**Component Analysis – Inventory**



The following components are identified under the following inventory lists:

<b>Component</b>	<b>CAS No.</b>	<b>TSCA</b>	<b>CAN</b>	<b>EEC</b>
Copper	7440-50-8	Yes	DSL	EINECS
Manganese	7439-96-5	Yes	DSL	EINECS
Nickel	7440-02-0	Yes	DSL	EINECS
Phosphorus	7723-14-0	Yes	DSL	EINECS
Zinc	7440-66-6	Yes	DSL	EINECS
Iron	7439-89-6	Yes	DSL	EINECS
Tin	7440-31-5	Yes	DSL	EINECS
Silicon	7440-21-3	Yes	DSL	EINECS

## Section 16 - Other Information

- Classification method for mixtures** • Cut-off values/concentration limits of ingredients.
- Last Revision Date** • No data available
- Preparation Date** • June 8, 2015
- Review Date** • November 25, 2020
- Disclaimer/Statement of Liability** • This information is taken from sources or based upon data believed to be reliable. However, Central Wire Industries Ltd makes no warranty as to the absolute correctness or sufficiency of any of the foregoing information or that additional or other measures may not be required under particular conditions.
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