

## 1. Product and Company Identification

<b>Product Name</b>	<b>Volcanic Lava Rock</b>
<b>CAS #</b>	Mixture
<b>Product use</b>	Sealant
<b>Manufacturer</b>	J.M. Power Aggregates Limited 1003 Stewartville Road Arrnprior, ON K7S 3G8 CA Phone: 613-623-7877 Fax: 613-623-3530 Email: info@jmpoweraggregates.ca

## 2. Hazards Identification

<b>Emergency overview</b>	Product dust may be irritating to eyes, skin and respiratory system.
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Eyes</b>	May cause abrasive deposits in eyes of a transient nature.
<b>Skin</b>	Mechanical rubbing may increase skin irritation.
<b>ACGIH - Threshold Limit Values - Skin Notations</b>	
Beryllium, elemental	7440-41-7      Skin - potential significant contribution to overall exposure by the cutaneous route
Mercury, elemental	7439-97-6      Skin - potential significant contribution to overall exposure by the cutaneous route
Thallium, elemental	7440-28-0      Skin - potential significant contribution to overall exposure by the cutaneous route
<b>NIOSH - Pocket Guide - Skin Notations</b>	
Mercury, elemental	7439-97-6      Potential for dermal absorption
<b>Inhalation</b>	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Target organs</b>	Respiratory system.
<b>Chronic effects</b>	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>OSHA Regulatory Status</b>	This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>Potential environmental effects</b>	See section 12.

### 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Aluminum, elemental	7429-90-5	< 0.1
Antimony, elemental	7440-36-0	< 0.1
Arsenic, elemental	7440-38-2	< 0.1
Barium	7440-39-3	< 0.1
Beryllium, elemental	7440-41-7	< 0.1
Boron	7440-42-8	< 0.1
Cadmium, elemental	7440-43-9	< 0.1
Chloride	16887-00-6	< 0.1
Chromium, elemental	7440-47-3	< 0.1
Copper, elemental	7440-50-8	< 0.1
Iron	7439-89-6	< 0.1
Lead, elemental	7439-92-1	< 0.1
Manganese, elemental	7439-96-5	< 0.1
Mercury, elemental	7439-97-6	< 0.1
Molybdenum, elemental	7439-98-7	< 0.1
Nickel, elemental	7440-02-0	< 0.1
Nitrogen	7727-37-9	< 0.1
Selenium, elemental	7782-49-2	< 0.1
Silver, elemental	7440-22-4	< 0.1
Sulfate	14808-79-8	< 0.1
Thallium, elemental	7440-28-0	< 0.1
Zinc, elemental	7440-66-6	< 0.1

#### Composition comments

Non-hazardous by WHMIS/OSHA criteria

\*\* Contains trace amounts of aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chloride, chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, nitrogen, selenium, silver, sulfate, thallium, zinc.

### 4. First Aid Measures

#### First aid procedures

##### Eye contact

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

##### Skin contact

Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

##### Inhalation

If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

##### Ingestion

Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

#### Notes to physician

Symptoms may be delayed.

#### General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

### 5. Fire Fighting Measures

#### Flammable properties

Not flammable by WHMIS/OSHA criteria.

#### Extinguishing media

##### Suitable extinguishing media

Material will not burn.

##### Unsuitable extinguishing media

Not available

#### Protection of firefighters

##### Specific hazards arising from the chemical

Not available

<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	No special environmental precautions required.
<b>Methods for containment</b>	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Avoid breathing dust.
<b>Storage</b>	Keep out of reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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### Exposure limits

Ingredient(s)	Exposure Limits
Aluminum, elemental	<b>ACGIH-TLV</b> TWA: 1 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 15 mg/m <sup>3</sup>
Antimony, elemental	<b>ACGIH-TLV</b> TWA: 0.5 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 0.5 mg/m <sup>3</sup>
Arsenic, elemental	<b>ACGIH-TLV</b> TWA: 0.01 mg/m <sup>3</sup> <b>OSHA-PEL</b> Not established
Barium	<b>ACGIH-TLV</b> TWA: 0.5 mg/m <sup>3</sup> <b>OSHA-PEL</b> Not established
Beryllium, elemental	<b>ACGIH-TLV</b> TWA: 0.0001 mg/m <sup>3</sup> STEL: 0.01 mg/m <sup>3</sup> <b>OSHA-PEL</b> Not established
Boron	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Cadmium, elemental	<b>ACGIH-TLV</b> TWA: 0.01 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 0.1 mg/m <sup>3</sup> Ceiling: 0.3 mg/m <sup>3</sup>
Chloride	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Chromium, elemental	<b>ACGIH-TLV</b> TWA: 0.5 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 1 mg/m <sup>3</sup>
Copper, elemental	<b>ACGIH-TLV</b> TWA: 0.2 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 0.1 mg/m <sup>3</sup>

Iron	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Lead, elemental	<b>ACGIH-TLV</b> TWA: 0.05 mg/m3 <b>OSHA-PEL</b> TWA: 0.05 mg/m3
Manganese, elemental	<b>ACGIH-TLV</b> TWA: 0.2 mg/m3 <b>OSHA-PEL</b> Ceiling: 5 mg/m3
Mercury, elemental	<b>ACGIH-TLV</b> TWA: 0.025 mg/m3 <b>OSHA-PEL</b> Ceiling: 0.1 mg/m3
Molybdenum, elemental	<b>ACGIH-TLV</b> TWA: 10 mg/m3 <b>OSHA-PEL</b> TWA: 5 mg/m3
Nickel, elemental	<b>ACGIH-TLV</b> TWA: 1.5 mg/m3 <b>OSHA-PEL</b> TWA: 1 mg/m3
Nitrogen	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Selenium, elemental	<b>ACGIH-TLV</b> TWA: 0.2 mg/m3 <b>OSHA-PEL</b> TWA: 0.2 mg/m3
Silver, elemental	<b>ACGIH-TLV</b> TWA: 0.1 mg/m3 <b>OSHA-PEL</b> TWA: 0.01 mg/m3
Sulfate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Thallium, elemental	<b>ACGIH-TLV</b> TWA: 0.02 mg/m3 <b>OSHA-PEL</b> Not established
Zinc, elemental	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

<b>Engineering controls</b>	Keep formation of dusts, particulates and fumes to a minimum. Where dust may be generated, provide exhaust ventilation to keep dust levels below their TLV.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear safety glasses with side shields.
<b>Hand protection</b>	Impervious gloves. Confirm with reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	ACGIH recommends a TLV of 10 mg/m <sup>3</sup> for nuisance dust. Use dust respirator where airborne dust levels exceed the occupational exposure limit. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Porous lava
<b>Color</b>	grey / Black to Red
<b>Form</b>	granular Solid.
<b>Odor</b>	None
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	Not available
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Viscosity</b>	Not available
<b>Percent volatile</b>	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	None known.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	In dust form, this product is explosive in presence of open flames, sparks and static discharge.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
Aluminum, elemental	Not available
Antimony, elemental	Not available
Arsenic, elemental	Not available
Barium	Not available
Beryllium, elemental	Not available
Boron	Not available
Cadmium, elemental	Not available
Chloride	Not available
Chromium, elemental	Not available
Copper, elemental	Not available
Iron	Not available
Lead, elemental	Not available
Manganese, elemental	Not available
Mercury, elemental	Not available
Molybdenum, elemental	Not available
Nickel, elemental	Not available
Nitrogen	Not available
Selenium, elemental	Not available
Silver, elemental	Not available
Sulfate	Not available
Thallium, elemental	Not available
Zinc, elemental	Not available

**Component analysis - Oral LD50**

<b>Ingredient(s)</b>	<b>LD50</b>
Aluminum, elemental	Not available
Antimony, elemental	7000 mg/kg rat
Arsenic, elemental	763 mg/kg rat
Barium	Not available
Beryllium, elemental	Not available
Boron	350 mg/kg rat
Cadmium, elemental	2330 mg/kg rat
Chloride	Not available
Chromium, elemental	Not available
Copper, elemental	Not available
Iron	984 mg/kg rat
Lead, elemental	Not available
Manganese, elemental	1715 mg/kg mouse; 9000 mg/kg rat
Mercury, elemental	Not available
Molybdenum, elemental	Not available
Nickel, elemental	Not available
Nitrogen	Not available
Selenium, elemental	Not available
Silver, elemental	2000 mg/kg rat
Sulfate	Not available
Thallium, elemental	Not available
Zinc, elemental	Not available

**Effects of acute exposure**

**Eye** May cause abrasive deposits in eyes of a transient nature.  
**Skin** Mechanical rubbing may increase skin irritation.

**ACGIH - Threshold Limit Values - Skin Notations**

Beryllium, elemental	7440-41-7	Skin - potential significant contribution to overall exposure by the cutaneous route
Mercury, elemental	7439-97-6	Skin - potential significant contribution to overall exposure by the cutaneous route
Thallium, elemental	7440-28-0	Skin - potential significant contribution to overall exposure by the cutaneous route

**NIOSH - Pocket Guide - Skin Notations**

Mercury, elemental	7439-97-6	Potential for dermal absorption
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**Inhalation** Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

**Ingestion** May cause stomach distress, nausea or vomiting.

**Sensitization** Non-hazardous by WHMIS/OSHA criteria.

**Chronic effects** Non-hazardous by WHMIS/OSHA criteria.



**Carcinogenicity**

See below.

**ACGIH - Threshold Limit Values - Carcinogens**

Aluminum, elemental	7429-90-5	A4 - Not Classifiable as a Human Carcinogen
Arsenic, elemental	7440-38-2	A1 - Confirmed Human Carcinogen
Barium	7440-39-3	A4 - Not Classifiable as a Human Carcinogen
Beryllium, elemental	7440-41-7	A1 - Confirmed Human Carcinogen
Cadmium, elemental	7440-43-9	A2 - Suspected Human Carcinogen
Chromium, elemental	7440-47-3	A4 - Not Classifiable as a Human Carcinogen
Lead, elemental	7439-92-1	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Mercury, elemental	7439-97-6	A4 - Not Classifiable as a Human Carcinogen
Nickel, elemental	7440-02-0	A5 - Not Suspected as a Human Carcinogen

**IARC - Group 1 (Carcinogenic to Humans)**

Arsenic, elemental	7440-38-2	Monograph 100C [in preparation]; Monograph 84 [2004] (in drinking water); Supplement 7 [1987]; Monograph 23 [1980]
Beryllium, elemental	7440-41-7	Monograph 100C [in preparation]; Monograph 58 [1993]; Supplement 7 [1987]
Cadmium, elemental	7440-43-9	Monograph 100C [in preparation]; Monograph 58 [1993]; Supplement 7 [1987]

**IARC - Group 2A (Probably Carcinogenic to Humans)**

Lead, elemental	7439-92-1	Monograph 87 [2006] (evaluates inorganic lead compounds as Group 2A and organic lead compounds as Group 3)
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**IARC - Group 2B (Possibly Carcinogenic to Humans)**

Nickel, elemental	7440-02-0	Monograph 49 [1990]; Supplement 7 [1987]
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**IARC - Group 3 (Not Classifiable)**

Chromium, elemental	7440-47-3	Monograph 49 [1990] (listed under Chromium and Chromium compounds); Supplement 7 [1987]
Mercury, elemental	7439-97-6	Monograph 58 [1993]
Selenium, elemental	7782-49-2	Supplement 7 [1987]; Monograph 9 [1975]

**NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens**

Arsenic, elemental	7440-38-2	Known Human Carcinogen (listed under Arsenic and Inorganic Arsenic Compounds)
Beryllium, elemental	7440-41-7	Known Human Carcinogen (listed under Beryllium and Beryllium Compounds)
Cadmium, elemental	7440-43-9	Known Human Carcinogen (listed under Cadmium and Cadmium Compounds)

**NTP (National Toxicology Program) - Report on Carcinogens - Reasonably Anticipated to be Human Carcinogens**

Lead, elemental	7439-92-1	Reasonably Anticipated To Be A Human Carcinogen
Nickel, elemental	7440-02-0	Reasonably Anticipated To Be A Human Carcinogen

**U.S. - California - Proposition 65 - Carcinogens List**

Beryllium, elemental	7440-41-7	carcinogen, initial date 10/1/87
Cadmium, elemental	7440-43-9	carcinogen, initial date 10/1/87
Lead, elemental	7439-92-1	carcinogen, initial date 10/1/92
Nickel, elemental	7440-02-0	carcinogen, initial date 10/1/89

**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria.**Reproductive effects** Non-hazardous by WHMIS/OSHA criteria.**Teratogenicity** Non-hazardous by WHMIS/OSHA criteria.**Name of Toxicologically Synergistic Products** Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	See below	
<b>Ecotoxicity - Freshwater Algae - Acute Toxicity Data</b>		
Copper, elemental	7440-50-8	72 Hr EC50 Pseudokirchneriella subcapitata: 0.0426 - 0.0535 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.031 - 0.054 mg/L [static]
Nickel, elemental	7440-02-0	72 Hr EC50 Pseudokirchneriella subcapitata: 0.18 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.174 - 0.311 mg/L [static]
Zinc, elemental	7440-66-6	96 Hr EC50 Pseudokirchneriella subcapitata: 0.11 - 0.271 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.09 - 0.125 mg/L [static]
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>		
Cadmium, elemental	7440-43-9	96 Hr LC50 Oncorhynchus mykiss: 0.003 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.006 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.002 mg/L; 96 Hr LC50 Cyprinus carpio: 4.26 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.24 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 21.1 mg/L [flow-through]; 96 Hr LC50 Oryzias latipes: 0.016 mg/L; 96 Hr LC50 Pimephales promelas: 0.0004-0.003 mg/L
Copper, elemental	7440-50-8	96 Hr LC50 Pimephales promelas: 0.0068 - 0.0156 mg/L; 96 Hr LC50 Pimephales promelas: <0.3 mg/L [static]; 96 Hr LC50 Pimephales promelas: 0.2 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.052 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1.25 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.3 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.8 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 0.112 mg/L [flow-through]
Iron	7439-89-6	96 Hr LC50 Morone saxatilis: 13.6 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.56 mg/L [semi-static]
Lead, elemental	7439-92-1	96 Hr LC50 Cyprinus carpio: 0.44 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 1.17 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.32 mg/L [static]
Mercury, elemental	7439-97-6	96 Hr LC50 Cyprinus carpio: 0.5 mg/L; 96 Hr LC50 Cyprinus carpio: 0.16 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.18 mg/L [static]; 96 Hr LC50 Oryzias latipes: 0.9 mg/L [flow-through]
Nickel, elemental	7440-02-0	96 Hr LC50 Brachydanio rerio: >100 mg/L; 96 Hr LC50 Cyprinus carpio: 1.3 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 10.4 mg/L [static]
Silver, elemental	7440-22-4	96 Hr LC50 Pimephales promelas: 0.00155-0.00293 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.0062 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.064 mg/L [static]
Zinc, elemental	7440-66-6	96 Hr LC50 Pimephales promelas: 2.16-3.05 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.211-0.269 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 2.66 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 30 mg/L; 96 Hr LC50 Cyprinus carpio: 0.45 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 7.8 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 3.5 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>		
Cadmium, elemental	7440-43-9	48 Hr EC50 Daphnia magna: 0.0244 mg/L [Static]
Copper, elemental	7440-50-8	48 Hr EC50 Daphnia magna: 0.03 mg/L [Static]
Lead, elemental	7439-92-1	48 Hr EC50 water flea: 600 µg/L
Mercury, elemental	7439-97-6	96 Hr EC50 water flea: 5.0 µg/L
Nickel, elemental	7440-02-0	48 Hr EC50 Daphnia magna: >100 mg/L; 48 Hr EC50 Daphnia magna: 1 mg/L [Static]
Silver, elemental	7440-22-4	48 Hr EC50 Daphnia magna: 0.00024 mg/L [Static]
Zinc, elemental	7440-66-6	48 Hr EC50 Daphnia magna: 0.139 - 0.908 mg/L [Static]
<b>Persistence / degradability</b>	Not available	
<b>Bioaccumulation / accumulation</b>	Not available	
<b>U.S. - CWA (Clean Water Act) - Bioaccumulative Chemicals of Concern (BCCs)</b>		
Mercury, elemental	7439-97-6	Present
<b>Mobility in environmental media</b>	Not available	
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Chemical fate information</b>	Not available	
<b>Other adverse effects</b>	Not available	

## 13. Disposal Considerations

<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

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## 14. Transport Information

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### U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

### Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

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## 15. Regulatory Information

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### Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### Canada - CEPA - Schedule I - List of Toxic Substances

Lead, elemental	7439-92-1	Present
Mercury, elemental	7439-97-6	Present

#### Canada - WHMIS - Ingredient Disclosure List

Aluminum, elemental	7429-90-5	1 %
Antimony, elemental	7440-36-0	1 %
Arsenic, elemental	7440-38-2	0.1 %
Beryllium, elemental	7440-41-7	0.1 %
Cadmium, elemental	7440-43-9	0.1 %
Chromium, elemental	7440-47-3	0.1 %
Copper, elemental	7440-50-8	1 %
Lead, elemental	7439-92-1	0.1 %
Manganese, elemental	7439-96-5	1 %
Mercury, elemental	7439-97-6	0.1 %
Molybdenum, elemental	7439-98-7	1 %
Nickel, elemental	7440-02-0	0.1 %
Selenium, elemental	7782-49-2	0.1 %
Silver, elemental	7440-22-4	1 %
Thallium, elemental	7440-28-0	1 %

**WHMIS status** Not Controlled

### Occupational Safety and Health Administration (OSHA)

**29 CFR 1910.1200 hazardous chemical** No

**US Federal regulations**

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**U.S. - CAA (Clean Air Act) - National Primary Ambient Air Quality Standards**

Lead, elemental	7439-92-1	1.5 µG/m3 (maximum arithmetic mean averaged over a calendar quarter, see 40 CFR Sections 50.12 and 50.16); 0.15 µg/m3 (arithmetic mean concentration over a 3-month period, see 40 CFR Sections 50.12 and 50.16)
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**U.S. - CAA (Clean Air Act) - National Secondary Ambient Air Quality Standards**

Lead, elemental	7439-92-1	1.5 µG/m3 (maximum arithmetic mean averaged over a calendar quarter, see 40 CFR Sections 50.12 and 50.16); 0.15 µg/m3 (arithmetic mean concentration over a 3-month period, see 40 CFR Sections 50.12 and 50.16)
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**U.S. - CAA (Clean Air Act) - SNAP Program Listing of Substitutes for ODSs**

Nitrogen	7727-37-9	Acceptable substitute for: 6
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**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

Antimony, elemental	7440-36-0	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Arsenic, elemental	7440-38-2	1 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 0.454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Beryllium, elemental	7440-41-7	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Cadmium, elemental	7440-43-9	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Chromium, elemental	7440-47-3	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Copper, elemental	7440-50-8	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Lead, elemental	7439-92-1	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Mercury, elemental	7439-97-6	1 Lb final RQ; 0.454 kg final RQ
Nickel, elemental	7440-02-0	100 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Selenium, elemental	7782-49-2	100 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Silver, elemental	7440-22-4	1000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Thallium, elemental	7440-28-0	1000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
Zinc, elemental	7440-66-6	454 Kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

Aluminum, elemental	7429-90-5	1.0 % de minimis concentration (dust or fume only)
Antimony, elemental	7440-36-0	1.0 % de minimis concentration
Arsenic, elemental	7440-38-2	0.1 % de minimis concentration
Barium	7440-39-3	1.0 % de minimis concentration
Beryllium, elemental	7440-41-7	0.1 % de minimis concentration
Cadmium, elemental	7440-43-9	0.1 % de minimis concentration
Chromium, elemental	7440-47-3	1.0 % de minimis concentration
Copper, elemental	7440-50-8	1.0 % de minimis concentration
Lead, elemental	7439-92-1	0.1 % Supplier notification limit; 0.1 % de minimis concentration (when contained in stainless steel, brass, or bronze)
Manganese, elemental	7439-96-5	1.0 % de minimis concentration
Mercury, elemental	7439-97-6	1.0 % Supplier notification limit
Nickel, elemental	7440-02-0	0.1 % de minimis concentration

Selenium, elemental	7782-49-2	1.0 % de minimis concentration
Silver, elemental	7440-22-4	1.0 % de minimis concentration
Thallium, elemental	7440-28-0	1.0 % de minimis concentration
Zinc, elemental	7440-66-6	1.0 % de minimis concentration (dust or fume only)

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

Lead, elemental	7439-92-1	100 Lb RT (this lower threshold does not apply to lead when it is contained in stainless steel, brass or bronze alloy)
Mercury, elemental	7439-97-6	10 Lb RT

**U.S. - CWA (Clean Water Act) - Bioaccumulative Chemicals of Concern (BCCs)**

Mercury, elemental	7439-97-6	Present
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**U.S. - CWA (Clean Water Act) - Priority Pollutants**

Antimony, elemental	7440-36-0	Present
Arsenic, elemental	7440-38-2	Present
Beryllium, elemental	7440-41-7	Present
Cadmium, elemental	7440-43-9	Present
Chromium, elemental	7440-47-3	Present
Copper, elemental	7440-50-8	Present
Lead, elemental	7439-92-1	Present
Mercury, elemental	7439-97-6	Present
Nickel, elemental	7440-02-0	Present
Selenium, elemental	7782-49-2	Present
Silver, elemental	7440-22-4	Present
Thallium, elemental	7440-28-0	Present
Zinc, elemental	7440-66-6	Present

**U.S. - CWA (Clean Water Act) - Toxic Pollutants**

Antimony, elemental	7440-36-0	Present
Arsenic, elemental	7440-38-2	Present
Beryllium, elemental	7440-41-7	Present
Cadmium, elemental	7440-43-9	Present
Chromium, elemental	7440-47-3	Present
Copper, elemental	7440-50-8	Present
Lead, elemental	7439-92-1	Present
Mercury, elemental	7439-97-6	Present
Nickel, elemental	7440-02-0	Present
Selenium, elemental	7782-49-2	Present
Silver, elemental	7440-22-4	Present
Thallium, elemental	7440-28-0	Present
Zinc, elemental	7440-66-6	Present

**CERCLA (Superfund) reportable quantity**

Nickel: 100.0000  
 Arsenic: 1.0000  
 Chromium: 5000.0000  
 Cadmium: 10.0000  
 Silver: 1000.0000  
 Copper: 5000.0000  
 Lead: 10.0000  
 Antimony: 5000.0000  
 Selenium: 100.0000  
 Beryllium: 10.0000  
 Thallium: 1000.0000  
 Mercury: 1.0000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

<b>Section 302 extremely hazardous substance</b>	No
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<b>Section 311 hazardous chemical</b>	No
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<b>Clean Water Act (CWA)</b>	Not available
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**State regulations**

See below

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Aluminum, elemental	7429-90-5	Present
Antimony, elemental	7440-36-0	Present
Arsenic, elemental	7440-38-2	Present (refers to any mixture containing >=0.02% Inorganic arsenic)
Beryllium, elemental	7440-41-7	Present (exempt when encapsulated in a capsule which meets the definition of Special Form Materials prescribed in 49 CFR 173.403(z))
Cadmium, elemental	7440-43-9	Present
Chromium, elemental	7440-47-3	Present
Copper, elemental	7440-50-8	Present
Iron	7439-89-6	Present
Lead, elemental	7439-92-1	Present
Manganese, elemental	7439-96-5	Present
Mercury, elemental	7439-97-6	Present
Molybdenum, elemental	7439-98-7	Present
Nickel, elemental	7440-02-0	Present
Selenium, elemental	7782-49-2	Present
Silver, elemental	7440-22-4	Present
Thallium, elemental	7440-28-0	Present
Zinc, elemental	7440-66-6	Present

**U.S. - California - Proposition 65 - Carcinogens List**

Beryllium, elemental	7440-41-7	carcinogen, initial date 10/1/87
Cadmium, elemental	7440-43-9	carcinogen, initial date 10/1/87
Lead, elemental	7439-92-1	carcinogen, initial date 10/1/92
Nickel, elemental	7440-02-0	carcinogen, initial date 10/1/89

**U.S. - California - Proposition 65 - Developmental Toxicity**

Cadmium, elemental	7440-43-9	developmental toxicity, initial date 5/1/97
Lead, elemental	7439-92-1	developmental toxicity, initial date 2/27/87
Mercury, elemental	7439-97-6	developmental toxicity, initial date 7/1/90

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

Lead, elemental	7439-92-1	female reproductive toxicity, initial date 2/27/87
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**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

Cadmium, elemental	7440-43-9	male reproductive toxicity, initial date 5/1/97
Lead, elemental	7439-92-1	male reproductive toxicity, initial date 2/27/87

**U.S. - Connecticut - Carcinogenic Substances**

Arsenic, elemental	7440-38-2	Present
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**U.S. - Illinois - Toxic Air Contaminant Carcinogens**

Arsenic, elemental	7440-38-2	ACGIH Carcinogen; IRIS A Carcinogen; NTP Known Carcinogen
Beryllium, elemental	7440-41-7	ACGIH Carcinogen; IRIS B2 Carcinogen; NTP Known Carcinogen
Cadmium, elemental	7440-43-9	ACGIH Carcinogen; IRIS B1 Carcinogen; NTP Known Carcinogen
Lead, elemental	7439-92-1	IRIS B2 Carcinogen; IARC 2A Carcinogen; NTP Anticipated Carcinogen
Nickel, elemental	7440-02-0	NTP Anticipated Carcinogen; IARC 2B Carcinogen

**U.S. - Illinois - Toxic Air Contaminants**

Antimony, elemental	7440-36-0	Present
Arsenic, elemental	7440-38-2	Present
Beryllium, elemental	7440-41-7	Present
Cadmium, elemental	7440-43-9	Present
Chromium, elemental	7440-47-3	Present
Copper, elemental	7440-50-8	Present
Lead, elemental	7439-92-1	Present
Manganese, elemental	7439-96-5	Present
Mercury, elemental	7439-97-6	Present
Nickel, elemental	7440-02-0	Present
Selenium, elemental	7782-49-2	Present

**U.S. - Louisiana - Reportable Quantity List for Pollutants**

Antimony, elemental	7440-36-0	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm)
Arsenic, elemental	7440-38-2	1 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm); 0.454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm)
Barium	7440-39-3	100 Lb RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm)
Beryllium, elemental	7440-41-7	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm)
Cadmium, elemental	7440-43-9	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >=100 µm)

Chromium, elemental	7440-47-3	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Copper, elemental	7440-50-8	5000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Lead, elemental	7439-92-1	10 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Manganese, elemental	7439-96-5	100 Lb RQ (no reporting required if diameter of solid metal pieces released is $> 100 \mu\text{m}$ )
Mercury, elemental	7439-97-6	1 Lb final RQ; 0.454 kg final RQ
Nickel, elemental	7440-02-0	100 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Selenium, elemental	7782-49-2	100 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Silver, elemental	7440-22-4	1000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Thallium, elemental	7440-28-0	1000 Lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )
Zinc, elemental	7440-66-6	454 Kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ ); 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is $\geq 100 \mu\text{m}$ )

**U.S. - Massachusetts - Right To Know List**

Aluminum, elemental	7429-90-5	Present
Antimony, elemental	7440-36-0	Present
Arsenic, elemental	7440-38-2	Carcinogen; Extraordinarily hazardous
Barium	7440-39-3	Present
Beryllium, elemental	7440-41-7	Carcinogen; Extraordinarily hazardous
Cadmium, elemental	7440-43-9	Carcinogen; Extraordinarily hazardous
Chromium, elemental	7440-47-3	Carcinogen; Extraordinarily hazardous
Copper, elemental	7440-50-8	Present
Lead, elemental	7439-92-1	Teratogen
Manganese, elemental	7439-96-5	Present
Mercury, elemental	7439-97-6	Present
Molybdenum, elemental	7439-98-7	Present
Nickel, elemental	7440-02-0	Carcinogen; Extraordinarily hazardous
Nitrogen	7727-37-9	Present
Selenium, elemental	7782-49-2	Present
Silver, elemental	7440-22-4	Present
Thallium, elemental	7440-28-0	Present
Zinc, elemental	7440-66-6	Present

**U.S. - Michigan - Critical Materials List**

Arsenic, elemental	7440-38-2	100 Lb Annual usage threshold
Beryllium, elemental	7440-41-7	100 Lb Annual usage threshold
Cadmium, elemental	7440-43-9	100 Lb Annual usage threshold
Chromium, elemental	7440-47-3	100 Lb Annual usage threshold
Copper, elemental	7440-50-8	100 Lb Annual usage threshold
Lead, elemental	7439-92-1	100 Lb Annual usage threshold
Mercury, elemental	7439-97-6	10 Lb Annual usage threshold
Nickel, elemental	7440-02-0	100 Lb Annual usage threshold
Selenium, elemental	7782-49-2	100 Lb Annual usage threshold
Silver, elemental	7440-22-4	100 Lb Annual usage threshold
Zinc, elemental	7440-66-6	100 Lb Annual usage threshold

**U.S. - Minnesota - Hazardous Substance List**

Aluminum, elemental	7429-90-5	Present (dust)
Antimony, elemental	7440-36-0	Present (as Sb)
Arsenic, elemental	7440-38-2	Carcinogen
Barium	7440-39-3	Present (as Ba)
Beryllium, elemental	7440-41-7	Carcinogen
Cadmium, elemental	7440-43-9	Carcinogen (as Cd, dust and fume)
Chromium, elemental	7440-47-3	Present
Copper, elemental	7440-50-8	Present (as Cu, dust, fume, and mist)
Lead, elemental	7439-92-1	Carcinogen (elemental, inorganic, fume, and dust)

Manganese, elemental	7439-96-5	Present (as Mn)
Mercury, elemental	7439-97-6	Skin
Molybdenum, elemental	7439-98-7	Present (as Mo)
Nickel, elemental	7440-02-0	Carcinogen (as Ni)
Nitrogen	7727-37-9	Present
Silver, elemental	7440-22-4	Present (as Ag)

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Aluminum, elemental	7429-90-5	sn 0054
Antimony, elemental	7440-36-0	sn 0141
Arsenic, elemental	7440-38-2	sn 0152
Barium	7440-39-3	sn 0180
Beryllium, elemental	7440-41-7	sn 0222
Boron	7440-42-8	sn 3201
Cadmium, elemental	7440-43-9	sn 0305
Chromium, elemental	7440-47-3	sn 0432
Copper, elemental	7440-50-8	sn 0528
Lead, elemental	7439-92-1	sn 1096
Manganese, elemental	7439-96-5	sn 1155 (dust and fume)
Mercury, elemental	7439-97-6	sn 1183
Molybdenum, elemental	7439-98-7	sn 1309
Nickel, elemental	7440-02-0	sn 1341 (dust and fume)
Nitrogen	7727-37-9	sn 1375 (compressed or liquefied)
Selenium, elemental	7782-49-2	sn 1648
Silver, elemental	7440-22-4	sn 1669
Thallium, elemental	7440-28-0	sn 1840
Zinc, elemental	7440-66-6	sn 2021 (dust and fume)

**U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances**

Antimony, elemental	7440-36-0	5000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Arsenic, elemental	7440-38-2	1 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 10 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Beryllium, elemental	7440-41-7	10 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 10 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Cadmium, elemental	7440-43-9	1 Lb RQ (air); 1 lb RQ (land/water); 10 lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 10 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Chromium, elemental	7440-47-3	5000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Copper, elemental	7440-50-8	5000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Lead, elemental	7439-92-1	10 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 10 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Mercury, elemental	7439-97-6	1 Lb RQ (air); 1 lb RQ (land/water)
Nickel, elemental	7440-02-0	100 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Selenium, elemental	7782-49-2	100 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Silver, elemental	7440-22-4	1000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Thallium, elemental	7440-28-0	1000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)
Zinc, elemental	7440-66-6	1000 Lb RQ (air, notification is not required if the mean diameter of the particles released is >100 µm); 100 lb RQ (land/water, notification is not required if the mean diameter of the particles released is >100 µm)

**U.S. - North Carolina - Control of Toxic Air Pollutants**

Arsenic, elemental	7440-38-2	0.0000023 mg/m3 (carcinogens)
Beryllium, elemental	7440-41-7	0.0000041 mg/m3 (carcinogens)
Cadmium, elemental	7440-43-9	0.0000055 mg/m3 (carcinogens)
Manganese, elemental	7439-96-5	0.031 mg/m3 (chronic toxicants)
Mercury, elemental	7439-97-6	0.0006 mg/m3 (vapor, chronic toxicants)
Nickel, elemental	7440-02-0	0.006 mg/m3 (chronic toxicants)

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

Arsenic, elemental	7440-38-2	Present
Beryllium, elemental	7440-41-7	Present
Cadmium, elemental	7440-43-9	Present (powder)
Chromium, elemental	7440-47-3	Present



Nickel, elemental	7440-02-0	Present
<b>U.S. - Pennsylvania - RTK (Right to Know) List</b>		
Aluminum, elemental	7429-90-5	Environmental hazard
Antimony, elemental	7440-36-0	Environmental hazard
Arsenic, elemental	7440-38-2	Environmental hazard (inorganic); Special hazardous substance
Barium	7440-39-3	Environmental hazard
Beryllium, elemental	7440-41-7	Environmental hazard (dust); Special hazardous substance
Cadmium, elemental	7440-43-9	Environmental hazard (dust, fume, powder); Special hazardous substance (powder)
Chromium, elemental	7440-47-3	Environmental hazard; Special hazardous substance
Copper, elemental	7440-50-8	Environmental hazard (dust and fume)
Lead, elemental	7439-92-1	Environmental hazard
Manganese, elemental	7439-96-5	Environmental hazard
Mercury, elemental	7439-97-6	Environmental hazard
Molybdenum, elemental	7439-98-7	Present
Nickel, elemental	7440-02-0	Environmental hazard; Special hazardous substance
Nitrogen	7727-37-9	Present
Selenium, elemental	7782-49-2	Environmental hazard
Silver, elemental	7440-22-4	Environmental hazard
Thallium, elemental	7440-28-0	Environmental hazard
Zinc, elemental	7440-66-6	Environmental hazard

**U.S. - Rhode Island - Hazardous Substance List**

Aluminum, elemental	7429-90-5	Toxic (dust, powder, welding fumes); Flammable (dust, powder, welding fumes)
Antimony, elemental	7440-36-0	Toxic
Arsenic, elemental	7440-38-2	Toxic; Carcinogen
Barium	7440-39-3	Toxic
Beryllium, elemental	7440-41-7	Toxic; Flammable; Carcinogen
Cadmium, elemental	7440-43-9	Toxic (dust); Carcinogen (dust)
Chromium, elemental	7440-47-3	Toxic; Carcinogen
Copper, elemental	7440-50-8	Toxic (dust, fume, and mist)
Manganese, elemental	7439-96-5	Toxic
Mercury, elemental	7439-97-6	Toxic (skin)
Molybdenum, elemental	7439-98-7	Toxic
Nickel, elemental	7440-02-0	Toxic; Carcinogen
Nitrogen	7727-37-9	Flammable (liquefied)
Selenium, elemental	7782-49-2	Toxic
Silver, elemental	7440-22-4	Toxic
Thallium, elemental	7440-28-0	Toxic (skin)
Zinc, elemental	7440-66-6	Flammable

**Inventory name**

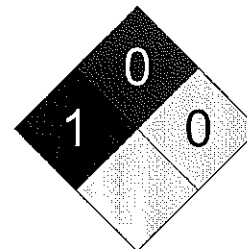
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	0
Physical Hazard	0
Personal Protection	X



**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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