SAFETY DATA SHEET

COPPER ALLOYS

SDS Revision Date: 12/15/20016

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: Copper Alloys
Alternate Names: Cu

1.2. Intended Use of the Product

Use of the Substance/Mixture: No use is specified.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (GHS-US)
Not Classified

2.2. Label Elements GHS-US Labeling

No labeling applicable

2.3. Other Hazards

This product is present in a massive form as an alloy. It does not present the same hazards when the individual components are in their powdered forms. The materials present in this product in their powdered forms present aquatic toxicity to the environment, pyrophoricity, flammability, self-heating capabilities, carcinogenicity, water reactivity, and acute toxicity. When processed or where dust is generated a combustible dust hazard may be present. Avoid generating dust, generating sparks, ignition sources, and take all precautions. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath. Under normal use and handling of the solid form of this material there are few health hazards. Cutting, welding, melting, grinding etc. of these materials will produce dust, fume or particulate containing the component elements of these materials. Exposure to the dust, fume or particulate of these materials may present significant

health hazards. Exposure to dust or fume may cause irritation of the eyes, skin and respiratory tract. Fine particulates dispersed in air may present an explosion hazard.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Copper	(CAS No) 7440-50-8	45 - 60, 60 - 99	Comb. Dust Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Zinc Oxide	(CAS No) 1314-13-2	<0.1, 0.1-1, 1-5, 5-10, 10-30, 30-40	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nickel	(CAS No) 7440-02-0	<0.1, 0.1-1, 1-5, 5-10, 10-30, 30-3	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Lead	(CAS No) 7439-92-1	<0.1, 0.1-1, 1-5, 5-10, 10-16	Aucte Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust, mist), H332 Carc. 1B, H350 Repr. 1A, H360 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aluminum	(CAS No) 7429-90-5	<0.1, 0.1-1, 1-5, 5-10, 10-16	Comb. Dust Flam. Sol. 1, H228 Water-react. 2, H261
Tin	(CAS No) 7440-31-5	<0.1, 0.1-1, 1-5, 5-10, 10-14	Comb. Dust
Iron Oxide	(CAS No) 1309-37-1	<0.1, 0.1-1, 1-5, 5-6	Not Classified
Manganese	(CAS No) 7439-96-5	<0.1, 0.1-1, 1-5	Comb. Dust

Silicon	(CAS No) 7440-21-3	<0.1, 0.1-1, 1-5	Comb. Dust
Beryllium	(CAS No) 7440-41-7	<0.1, 0.1-1, 1-2	Acute Tox. 2 (Inhalation:dust, mist), H330 Carc. 2, H351 STOT RE 1, H372

Full text of H-phrases: see section 16 More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary due to varying composition.

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: IF exposed or concerned: Get medical advice/attention. Never give anything by mouth to an unconscious person. Inhalation: When symptoms occur: go into open air and ventilate suspected area. Keep at rest and in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Obtain medical attention if irritation persists.

Eye Contact: Removal of solidified molten material from the eyes requires medical assistance. Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Welding, cutting, or processing this material may release dust or fumes that are hazardous. **Inhalation:** Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

Skin Contact: May cause an allergic skin reaction. Dust from physical alteration of this product causes skin irritation. Causes severe skin burns. Contact with fumes or metal powder will irritate skin. Contact with hot, molten metal will cause thermal burns. Dust may cause irritation in skin

folds or by contact in combination with tight clothing. Mechanical damage via flying particles and chipped slag is possible.

Eye Contact: Dust may cause mechanical irritation to eyes, nose, throat, and lungs.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: In massive form, no hazard exists. If physically altered to present slivers, ribbons, dusts or fumes from molten material: Aluminum: Inhalation of finely divided aluminum powder may cause pulmonary fibrosis. Inhalation of iron oxide fumes undergoing decomposition may cause irritation and flu-like symptoms, otherwise iron oxide is not hazardous. Inhalation of Nickel compounds has been shown in studies to provide an increased incidence of cancer of the nasal cavity, lung and possibly larynx in nickel refinery workers. Nickel: May cause a form of dermatitis known as nickel itch and intestinal irritation, which may cause disorders, convulsions and asphyxia. Zinc: Prolonged exposure to high concentrations of zinc fumes may cause "zinc shakes", an involuntary twitching of the muscles. Otherwise, zinc is non-toxic. Manganese : Chronic exposure can cause inflammation of the lung tissue, scarring the lungs (pulmonary fibrosis). Copper: Overexposure to fumes may cause metal fume fever (chills, muscle aches, nausea, fever, dry throat, cough, weakness, lassitude); metallic or sweet taste; discoloration of skin and hair. Tissue damage of mucous membranes may follow chronic dust exposure. Silicon : Can cause chronic bronchitis and narrowing of the airways. Lead: Exposure can result in lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension. May cause genetic defects. May damage fertility. May damage the unborn child. Beryllium: Over time inhalation of dust and fumes from this product in certain individuals may cause Chronic Beryllium Disease. This causes allergic reactions in sensitized individuals in the lungs, possibly resulting in pulmonary fibrosis, and can even be fatal. Beryllium is a known carcinogen. Take appropriate precautions for workers exposure to Beryllium compounds, avoid breathing dust, and fumes from this product. Tin: Has been shown to increase incidence of sarcoma in animal tests. Chronic exposure to tin dusts and fume may result in "stannosis", a mild form of pneumoconiosis.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Dry sand; Class D Extinguishing Agent (for metal powder fires).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Do not use water when molten material is involved, may react violently or explosively on contact with water.

Fire Hazard: A non-combustible material, not considered flammable but will melt above 1470F (800C).

Explosion Hazard: In molten state: reacts violently with water (moisture).

Reactivity: Hazardous reactions will not occur under normal conditions.

5.2. Special Hazards Arising From the Substance or Mixture

Hazardous decomposition: No hazardous decomposition data available.

Avoid breathing dust / fume / gas / mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

5.3. Advice for Firefighters

Precautionary Measures Fire: Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Oxides of tin. Oxides of nickel. Oxides of copper. Chromium oxides. Oxides of silicone and carbon. Oxides of lead. Oxides of aluminum. Cobalt oxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not handle until all safety precautions have been read and understood. Do not breathe vapors from molten product.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. For particulates and dust: Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May generate flammable/explosive dusts or turnings when brushed, machined or ground. Use care during processing to minimize generation of dust. Where excessive dust may result, use approved respiratory protection equipment. Heating of product can release toxic or irritating fumes; ensure proper ventilation is employed, proper precautions are enforced, and applicable regulations are followed. Inhalation of fumes may cause metal fume fever.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Alkalis. Metal oxides. Water, humidity. Corrosive substances in contact with metals may produce flammable hydrogen gas.

7.3. Specific End Use(s)

No use is specified.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure

CAS No.	Ingredient	Source	Value
0007429-90-5	Aluminum (AL)	OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)

		ACGIH	TWA: 1.o mg/m3 Revised 2008,
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		Supplier	No Established Limit
0007439-89-6	Iron	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0007439-92-1	Lead Compounds (as Pb)	OSHA	[1910.1025] TWA 0.050 mg/m3
		ACGIH	TWA: 0.05 mg/m3 R, 2B, 2A
		NIOSH	TWA (8-hour) 0.050 mg/m3
		Supplier	No Established Limit
0007439-96-5	Manganese compounds (as Mn)	OSHA	C 5 mg/m3 *See specific listings for specific compounds.
		ACGIH	TWA: 0.2 mg/m3 R
		NIOSH	TWA 1 mg/m3 ST 3 mg/m3 *See specific listings for specific compounds.
		Supplier	No Established Limit
0007440-02-0	Nickel	OSHA	TWA 1 mg/m3 [*Note: The PEL does not apply to Nickel carbonyl.]
		ACGIH	Insoluble TWA: 0.05 mg/m3 A1, 1, (I) Soluble TWA: 0.05 mg/m3 A1, 1, 2B, (I)
		NIOSH	Ca TWA 0.015 mg/m3 [*Note: The REL does not apply to Nickel carbonyl.]
		Supplier	No Established Limit
0007440-21-3	Silicon	OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)
		ACGIH	No Established Limit
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		Supplier	No Established Limit
0007440-31-5	Tin	OSHA	TWA 2 mg/m3 [*Note:PEL also applies to other inorganic tin compounds (as Sn) except tin oxides.]
		ACGIH	TWA: 2 mg/m3 (Oxide and inorganic compounds, except tin hydride) TWA: 0.2, STEL 0.1 mg/m3 (Tin - Organic Compounds)
		NIOSH	TWA 2 mg/m3 [*Note:The REL also applies to other inorganic tin compounds (as Sn) except tin oxides.]
		Supplier	No Established Limit
0007440-41-7	Beryllium	OSHA	TWA 0.002 mg/m3 C 0.005 mg/m3 (30 minutes), with a maximum peak of 0.025 mg/m3

		ACGIH	TWA: 0.002 mg/m3 STEL: 0.01 mg/m3 Skin, SA1, 1, Revised 2009; 2010,
		NIOSH	Ca C 0.0005 mg/m3
		Supplier	No Established Limit
0007440-48-4	Cobalt compounds (as Co)	OSHA	TWA 0.1 mg/m3
		ACGIH	TWA: 0.02 mg/m3 2B
		NIOSH	TWA 0.05 mg/m3
		Supplier	No Established Limit
0007440-50-8	Copper	OSHA	TWA 1 mg/m3 [*Note: The PEL also applies to other copper compounds (as Cu) except copper fume.]
		ACGIH	TWA: 0.2 mg/m3 (fume) 1 mg/m3 (dusts and mists)
		NIOSH	TWA 1 mg/m3 [*Note: The REL also applies to other copper compounds (as Cu) except Copper fume.]
		Supplier	No Established Limit
0007440-66-6	Zinc powder (stabilized)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0007429-90-5	Aluminum (AL)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007439-89-6	Iron	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007439-92-1	Lead Compounds	OSHA	Select Carcinogen: Yes

	(as Pb)	NTP	Known: No; Suspected: Yes
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0007439-96-5	Manganese compounds (as Mn)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-02-0	Nickel	OSHA	Select Carcinogen: Yes
		NTP	Known: Yes; Suspected: Yes
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0007440-21-3	Silicon	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-31-5	Tin	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-41-7	Beryllium	OSHA	Select Carcinogen: Yes
		NTP	Known: Yes; Suspected: Yes
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-48-4	Cobalt compounds (as Co)	OSHA	Select Carcinogen: Yes
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0007440-50-8	Copper	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-66-6	Zinc powder	OSHA	Select Carcinogen: No

	(stabilized)	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory: Wear NIOSH approved dust / mist / fume respirator when welding or burning this metal.

Eyes: Face shields (welding or burning), Safety glasses (cutting or grinding).

Skin: Use appropriate protective clothing such as welding aprons and gloves when welding or burning.

Engineering Controls: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Metal Solid
Odor	Odorless
Odor threshold	Not determined
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	NA
Flash Point	Nonflammable
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	NA
Vapor Density	NA
Specific Gravity	7.78 - 8.94
Solubility in Water	Insoluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	NA

Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

No other relevant information.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong Acids (such as Sulfuric, Hydrochloric, Nitric).

10.6. Hazardous decomposition products

No hazardous decomposition data available.

SECTION 11: TOXICOLOGY INFORMATION

Acute Toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Copper - (7440-50-8)	2,500.00, Rat - Category: 5	>2,000.00, Rat - Category: 5	No data available	5.11, Rat - Category: NA	No data available
Zinc powder (stabilized) - (7440-66-6)	No data available	No data available	No data available	No data available	No data available
Nickel - (7440-02-0)	No data available	No data available	No data available	No data available	No data available
Aluminum (Al) - (7429-90-5)	No data available	No data available	No data available	No data available	No data available

Lead Compounds (as Pb) - (7439-92-1)	No data available	No data available	No data available	No data available	No data available
Tin - (7440-31-5)	No data available	No data available	No data available	No data available	No data available
Iron - (7439-89-6)	30,000.00, Rat - Category: NA	No data available	No data available	No data available	No data available
Manganese compounds (as Mn) - (7439-96-5)	9,000.00, Rat - Category: NA	500.00, Rabbit - Category: 3	19.00, Rat - Category: 4	No data available	No data available
Silicon - (7440-21-3)	No data available	No data available	No data available	No data available	No data available
Cobalt compounds (as Co) - (7440-48-4)	6,171.00, Rat - Category: NA	No data available	No data available	No data available	No data available
Beryllium - (7440-41-7)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	**Category**	**Hazard Description**
Acute toxicity (oral)	-	Not Applicable
Acute toxicity (dermal)	-	Not Applicable
Acute toxicity (inhalation)	4	Harmful if inhaled
Skin corrosion/irritation	3	Causes mild skin irritation
Serious eye damage/irritation	-	Not Applicable
Respiratory sensitization	1	May cause allergy or asthma symptoms if inhaled
Skin sensitization	1	May cause an alergic skin reaction
Germ cell mutagenicity	-	Not Applicable
Carcinogenicity	1A	May cause cance
Reproductive toxicity	-	Not Applicable
STOT-single exposure	-	Not Applicable
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	-	Not Applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Copper - (7440-50-8)	0.0103, Pimephales promelas	0.0025, Daphnia magna	0.018 (72 hr), Pseudokirchneriella subcapitata
Zinc powder (stabilized) - (7440-66-6)	0.182, Oncorhynchus tshawytscha	0.068, Daphnia magna	0.106 (72 hr), Pseudokirchneriella subcapitata
Nickel - (7440-02-0)	No data available	No data available	No data available
Aluminum (Al) - (7429-90-5)	No data available	No data available	No data available
Lead Compounds (as Pb) - (7439-92-1)	0.44, Cyprinus carpio	4.40, Daphnia magna	0.25 (72 hr), Scenedesmus subspicatus
Tin - (7440-31-5)	No data available	No data available	No data available
Iron - (7439-89-6)	No data available	No data available	No data available
Manganese compounds (as Mn) - (7439-96-5)	40.00, Daphnia magna	No data available	No data available
Silicon - (7440-21-3)	No data available	No data available	No data available
Cobalt compounds (as Co) - (7440-48-4)	100.00, Danio rerio	No data available	0.05 (72 hr), Pseudokirchneriella subcapitata
Beryllium - (7440-41-7)	No data available	No data available	No data available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Recycle product or dispose properly.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

Regulatory Overview

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)

All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification

D2A

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs):

Beryllium (10.00)

Copper (5,000.00)

Lead Compounds (as Pb) (10.00)

Nickel (100.00)

Zinc powder (stabilized) (1,000.00)

EPCRA 302 Extremely Hazardous:

Phosphorus

EPCRA 313 Toxic Chemicals:

Aluminum (Al)
Beryllium
Cobalt compounds (as Co)
Copper
Lead Compounds (as Pb)
Manganese compounds (as Mn)
Nickel
Zinc powder (stabilized)

Proposition 65 - Carcinogens (>0.0%):

Beryllium
Cobalt compounds (as Co)
Lead Compounds (as Pb)
Nickel

Proposition 65 - Developmental Toxins (>0.0%):

Lead Compounds (as Pb)

Proposition 65 - Female Repro Toxins (>0.0%):

Lead Compounds (as Pb)

Proposition 65 - Male Repro Toxins (>0.0%):

Lead Compounds (as Pb)

New Jersey RTK Substances (>1%):

Aluminum (Al)
Beryllium
Cobalt compounds (as Co)
Copper
Lead Compounds (as Pb)
Manganese compounds (as Mn)
Nickel
Silicon
Tin
Zinc powder (stabilized)

Pennsylvania RTK Substances (>1%):

Aluminum (Al)
Beryllium
Cobalt compounds (as Co)
Copper
Lead Compounds (as Pb)
Manganese compounds (as Mn)
Nickel
Silicon

Tin
Zinc powder (stabilized)

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H228 Flammable solid.
H261 In contact with water releases flammable gases.
H301 Toxic if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H350 May cause cancer.
H350i May cause cancer if inhaled.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.