

Beta Titanium, TNT archwires, Retainium, and Extend System Wires

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/11/2019

Version: 4

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

1.1. Product identifier

Product form : Titanium alloy
Product name : Beta Titanium, TNT archwires, Retainium, and Extend System Wires

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For professional use only.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Reliance Orthodontic Products Inc.

1540 West Thorndale Ave.

Itasca, IL 60143 USA

630-773-4009, during normal business hours

1.4. Emergency telephone number

CHEMTREC - 24-Hour Hazmat Emergency : Domestic: 1-800-424-9300
Communications Center

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Non-hazardous in solid, bulk form

Titanium is generally not considered hazardous in the form shipped (solid bars, billets wire, etc.), however, if your process involves grinding, melting, welding, cutting, sawing, brazing, buffing, polishing, or other similar heat-generating processes, or any other process that causes a release of dust or fume, hazardous levels of dust or fume of the constituents of these alloys could be generated. The following potentially hazardous airborne particles and/or fumes may be generated: Titanium dioxide an IARC Group 2B carcinogen, Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer. Vanadium pentoxide (V₂O₅) affects eyes, skin, respiratory system, Zinc, copper, magnesium, or cadmium fumes may cause metal fume fever, Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation. When used as intended titanium may not be carcinogenic.

Dust or fine turnings may cause:

Allergic skin reaction H317
Eye Irritation H319
May cause respiratory irritation H335
May cause cancer by inhalation H350i

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: Bulk, solid material is non-hazardous
Hazard statements for dust or fine turnings:
H317 – May cause an allergic skin reaction
H319 – Causes serious eye irritation
H335 – May cause respiratory irritation
Hazard statement for metal fume:
H350i – May cause cancer by inhalation

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Precautionary statements (GHS-US)

: Bulk, solid material is non-hazardous

For dust or fine turnings:

P210 – Keep away from heat/sparks/open flames/ hot surfaces. No smoking.

P242 – Use only non-sparking tools.

P243 – Take precautionary measures against static discharge.

P264 – Wash skin thoroughly after handling.

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

P305+P351+P338 IF IN EYES: Rinse with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P342 + P311 – If experiencing respiratory symptoms, call a poison center or physician

P370 + P378 – In case of fire: Use dry sane, dry chemical, CO2 or Class D Extinguisher.

For metal fume:

P260 – Do not breathe dust/fume/gas/mist/vapor/spray.

P284 – In case of inadequate ventilation, wear respiratory protection

Hazards not otherwise classified:

Dust or fine turnings may be irritating to mucous membranes, respiratory tract or eyes upon contact.

2.3. Other hazards

Not Applicable

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Chemical Name	CAS No.	Weight-%
Titanium	7440-32-6	50 - 100
Aluminum	7429-90-5	0 - 40
Molybdenum	7439-98-7	1 - 15
Chromium	7440-47-3	0 - 10
Niobium (Columbium)	7440-03-1	0 - 10
Vanadium	7440-62-2	0 - 10
Zirconium	7440-67-7	0 - 10
Tin	7440-31-5	0 - 5
Copper	7440-50-8	0 - 5
Iron	7439-89-6	0 - 5
Silicon	7440-21-3	0 - 1
Nickel	7440-02-0	0 - 0.9

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- inhalation : If excessive amounts of smoke, fume, or particulate are inhaled during processing, remove to fresh air and consult a qualified health professional.
- skin contact : In the case of skin irritation or allergic reactions see a physician.
- eye contact : Dust may cause irritation. In the case of eye contact, flush with large amounts of water for at least 15 minutes and seek immediate medical attention.
- ingestion : Not an expected route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

Exposure to dust or metal fumes may irritate respiratory system and result in metal fume fever.

May cause allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media | : Use dry sane, dry chemical, CO2 or Class D Extinguisher. |
| Unsuitable extinguishing media | : Do not spray water on burning metal as an explosion may occur. This explosive characteristic is caused by the hydrogen and steam generated by the reaction of water with the burning material. |

5.2. Special hazards arising from the substance or mixture

Intense heat. Very fine, high surface area material resulting from grinding, buffing, polishing, or similar processes of this product may ignite spontaneously at room temperature. **WARNING:** Fine particles resulting from grinding, buffing, polishing, or similar processes of this product may form combustible dust-air mixtures. Keep particles away from all ignition sources including heat, sparks, and flame. Prevent dust accumulations to minimize combustible dust hazard.

Hazardous combustion products Titanium dioxide an IARC Group 2B carcinogen, Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system, Zinc, copper, magnesium, or cadmium fumes may cause metal fume fever. Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

Explosion data

Sensitivity to Mechanical Impact None. **Sensitivity to Static Discharge** None.

5.3. Advice for firefighters

- | | |
|--------------------------------|------------------------------------------|
| Firefighting instructions | : Use self-contained breathing apparatus |
| Protection during firefighting | : No data available. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- | | |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective Equipment | Use appropriate personal protective equipment based on site conditions. |
| Emergency procedures | : Avoid breathing dust or fumes. Use adequate ventilation. Remove all ignition sources if dust is present. Note that dust and fine shavings may be flammable. |

6.1.2. For emergency responders

- | | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : Use appropriate personal protective equipment based on site conditions. |
| Emergency procedures | : Control ignition sources and use non-sparking tools when handling dust or finely ground turnings which may be flammable. |

6.2. Environmental precautions

Not applicable to massive product.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|--------------------------------------|
| Methods for cleaning up | : Not applicable to massive product. |
|-------------------------|--------------------------------------|

6.4. Reference to other sections

See Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | : Very fine, high surface area material resulting from grinding, buffing, polishing, or similar processes of this product may ignite spontaneously at room temperature. WARNING: Fine particles resulting from grinding, buffing, polishing, or similar processes of this product may form combustible dust-air mixtures. Keep particles away from all ignition sources including heat, sparks, and flame. Prevent dust accumulations to minimize combustible dust hazard. |
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7.2. Conditions for safe storage, including any incompatibilities

- | | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conditions for Safe Storage | : Keep chips, turnings, dust, and other small particles away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). |
| Incompatibilities | : Dissolves in hydrofluoric acid, Ignites in the presence of fluorine: When heated above 200°C, reacts exothermically with the following. Chlorine, bromine, halocarbons, carbon tetrachloride, carbon tetrafluoride, and freon. |

7.3. Specific end use(s)

Apart from those mentioned in Section 1.2, no other specific uses are stipulated.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	ACGIH TLV	OSHA PEL
Titanium 7440-32-6	-	-
Aluminum 7429-90-5	TWA: 1 mg/m ³ respirable fraction	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction
Molybdenum 7439-98-7	TWA: 10 mg/m ³ inhalable fraction TWA: 3 mg/m ³ respirable fraction	-
Zirconium 7440-67-7	STEL: 10 mg/m ³ STEL: 10 mg/m ³ Zr TWA: 5 mg/m ³ TWA: 5 mg/m ³ Zr	TWA: 5 mg/m ³ Zr (vacated) STEL: 10 mg/m ³ (vacated) STEL: 10 mg/m ³ Zr
Vanadium 7440-62-2	-	Ceiling: 0.5 mg/m ³ V2O5 respirable dust Ceiling: 0.1 mg/m ³ V2O5 fume
Niobium (Columbium) 7440-03-1	-	-
Chromium 7440-47-3	TWA: 0.5 mg/m ³	TWA: 1 mg/m ³
Tin 7440-31-5	TWA: 2 mg/m ³ TWA: 2 mg/m ³ Sn except Tin hydride	TWA: 2 mg/m ³ Sn except oxides
Iron 7439-89-6	-	-
Copper 7440-50-8	TWA: 0.2 mg/m ³ fume TWA: 1 mg/m ³ Cu dust and mist	TWA: 0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist
Silicon 7440-21-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction
Nickel 7440-02-0	TWA: 1.5 mg/m ³ inhalable fraction	TWA: 1 mg/m ³

8.2. Exposure controls

- 8.2.1 Appropriate Engineering Controls : Provide local exhaust when cutting, grinding, or heating. Use good industrial hygiene practices. Keep dust and fume buildup to a minimum and avoid generation of uncontrolled particles. Avoid static discharge where dust or turnings are generated.
- 8.2.2 Personal Protective Equipment:
- Respiratory Protection : When particulates/fumes/gases are generated and if exposure limits are exceeded or irritation is experienced, proper approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
 - Skin and body Protection : Fire/flammable resistant/retardant clothing may be appropriate during hot work with the product. Cut-resistant gloves and/or protective clothing may be appropriate when sharp surfaces are present.
 - Eye/face Protection : When airborne particles may be present, appropriate eye protection is recommended. For example, tight-fitting goggles, foam-lined safety glasses or other protective equipment that shield the eyes from particles.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid metallic, gray or silver
- Odor : No odor/orderless
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate : No data available
- Melting point : 1540-1670 °C / 2800-3000°F
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : Product not flammable in the form as distributed, flammable as finely divided particles or pieces resulting from processing of this product
- Vapor pressure : No data available

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Specific gravity	: 4.5
Relative vapor density at 20 °C	
Relative density	: No data available
Solubility	: Insoluble
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not applicable.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing. Hazardous polymerization does not occur.

10.4. Conditions to avoid

Dust formation and dust accumulation.

10.5. Incompatible materials

Dissolves in hydrofluoric acid, Ignites in the presence of fluorine: When heated above 200°C, reacts exothermically with the following. Chlorine, bromine, halocarbons, carbon tetrachloride, carbon tetrafluoride, and freon.

10.6. Hazardous decomposition products

When product is subjected to welding, burning, melting, sawing, brazing, grinding, buffing, polishing, or other similar heat-generating processes, the following potentially hazardous airborne particles and/or fumes may be generated:: Titanium dioxide an IARC Group 2B carcinogen, Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system, Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	: Not an expected route of exposure for product in massive form.
Eye contact	: Not an expected route of exposure for product in massive form.
Skin contact	: Nickel or Cobalt containing alloys may cause sensitization by skin contact.
Ingestion	: Not an expected route of exposure for product in massive form.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium 7440-32-6	> 5000 mg/kg bw	-	-
Aluminum 7429-90-5	15,900 mg/kg bw	-	> 1 mg/L
Molybdenum 7439-98-7	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.10 mg/L
Zirconium 7440-67-7	5000 mg/kg bw	-	>4.3 mg/L
Vanadium 7440-62-2	> 2000 mg/kg bw	-	-
Niobium (Columbium) 7440-03-1	> 10,000 mg/kg bw	> 2000 mg/kg bw	-
Chromium 7440-47-3	> 3400 mg/kg bw	-	> 5.41 mg/L
Tin 7440-31-5	> 2000 mg/kg bw	> 2000 mg/kg bw	> 4.75 mg/L
Iron 7439-89-6	98,600 mg/kg bw	-	> 0.25 mg/L
Copper 7440-50-8	481 mg/kg bw	>2000 mg/kg bw	>5.11 mg/L
Silicon 7440-21-3	> 5000 mg/kg bw	> 5000 mg/kg bw	> 2.08 mg/L
Nickel 7440-02-0	> 9000 mg/kg bw	-	> 10.2 mg/L

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Information on toxicological effects

Symptoms: Nickel or Cobalt containing alloys may cause sensitization by skin contact.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	Product not classified.
Skin corrosion/irritation	Product not classified.
Serious eye damage/eye irritation	Product not classified.
Sensitization	Nickel or Cobalt containing alloys may cause sensitization by skin contact.
Germ cell mutagenicity	Product not classified.
Carcinogenicity	Product not classified.

Chemical Name	ACGIH	IARC	NTP	OSHA
Chromium 7440-47-3		Group 3		
Nickel 7440-02-0		Group 1 Group 2B	Known Reasonably Anticipated	X

Reproductive toxicity:	Product not classified.
STOT - single exposure:	Product not classified.
STOT - repeated exposure:	Product not classified.
Aspiration hazard:	Product not classified.

SECTION 12: Ecological information

12.1. Ecotoxicity

This product as shipped is not classified for aquatic toxicity.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Titanium 7440-32-6	The 72 h EC50 of titanium dioxide to Pseudokirchnerella subcapitata was 61 mg of TiO2/L.	The 96 h LC50 of titanium dioxide to Cyprinodon variegatus was greater than 10,000 mg of TiO2/L. The 96 h LC50 of titanium dioxide to Pimephales promelas was greater than 1,000 mg of TiO2/L.	The 3 h EC50 of titanium dioxide for activated sludge were greater than 1000 mg/L.	The 48 h EC50 of titanium dioxide to Daphnia Magna was greater than 1000 mg of TiO2/L.
Aluminum 7429-90-5	The 96-h EC50 values for reduction of biomass of Pseudokirchneriella subcapitata in AAP-Medium at pH 6, 7, and 8 were estimated as 20.1, 5.4, and 150.6 µg/L, respectively, for dissolved Al.	The 96 h LC50 of aluminum to Oncorhynchus mykiss was 7.4 mg of Al/L at pH 6.5 and 14.6 mg of Al/L at pH 7.5	-	The 48-hr LC50 for Ceriodaphnia dubia exposed to Aluminium chloride increased from 0.72 to greater than 99.6 mg/L with water hardness increasing from 25 to 200 mg/L.
Molybdenum 7439-98-7	The 72 h EC50 of sodium molybdate dihydrate to Pseudokirchneriella subcapitata was 362.9 mg of Mo/L.	The 96 h LC50 of sodium molybdate dihydrate to Pimephales promelas was 644.2 mg/L	The 3 h EC50 of molybdenum trioxide for activated sludge was 820 mg/L.	The 48 h LC50 of sodium molybdate dihydrate to Ceriodaphnia dubia was 1,015 mg/L. The 48 h LC50 of sodium molybdate dihydrate to Daphnia magna was greater than 1,727.8 mg/L.
Zirconium 7440-67-7	The 14 d NOEC of zirconium dichloride oxide to Chlorella vulgaris was greater than 102.5 mg of Zr/L.	The 96 h LL50 of zirconium to Danio rerio was greater than 74.03 mg/L.	-	The 48 h EC50 of zirconium dioxide to Daphnia magna was greater than 74.03 mg of Zr/L.
Vanadium 7440-62-2	The 72 h EC50 of vanadium pentoxide to Desmodesmus subspicatus was 2,907 ug of V/L.	The 96 h LC50 of vanadium pentoxide to Pimephales promelas was 1,850 ug of V/L.	The 3 h EC50 of sodium metavanadate for activated sludge was greater than 100 mg/L.	The 48 h EC50 of sodium vanadate to Daphnia magna was 2,661 ug of V/L.
Niobium (Columbium) 7440-03-1	-	-	-	-

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Chromium 7440-47-3	-	-	-	-
Tin 7440-31-5	The 72 h EC50 of tin chloride pentahydrate to <i>Pseudokirchnerella subcapitata</i> was 9,846 ug of Sn/L	The 7 d LOEC of tin chloride pentahydrate to <i>Pimephales promelas</i> was 827.9 ug of Sn/L	-	The 7 d LC50 of tin chloride pentahydrate to <i>Ceriodaphnia dubia</i> was greater than 3,200 ug of Sn/L.
Iron 7439-89-6	-	The 96 h LC50 of 50% iron oxide black in water to <i>Danio rerio</i> was greater than 10,000 mg/L.	The 3 h EC50 of iron oxide for activated sludge was greater than 10,000 mg/L.	The 48 h EC50 of iron oxide to <i>Daphnia magna</i> was greater than 100 mg/L.
Copper 7440-50-8	The 72 h EC50 values of copper chloride to <i>Pseudokirchnerella subcapitata</i> ranged between 30 µg/L (pH 7.02, hardness 250 mg/L CaCO ₃ , DOC 1.95 mg/L) and 824 µg/L (pH 6.22, hardness 100 mg/L CaCO ₃ , DOC 15.8 mg/L).	The 96-hr LC50 for <i>Pimephales promelas</i> exposed to Copper sulfate ranged from 256.2 to 38.4 ug/L with water hardness increasing from 45 to 255.7 mg/L.	The 24 h NOEC of copper chloride for activated sludge ranged from 0.32 to 0.64 mg of Cu/L.	The 48 h LC50 values for <i>Daphnia magna</i> exposed to copper in natural water ranged between 33.8 µg/L (pH 6.1, hardness 12.4 mg/L CaCO ₃ , DOC 2.34 mg/L) and 792 µg/L (pH 7.35, hardness 139.7 mg/L CaCO ₃ , DOC 22.8 mg/L).
Silicon 7440-21-3	The 72 h EC50 of sodium metasilicate pentahydrate to <i>Pseudokirchnerella subcapitata</i> was greater than 250 mg/L.	-	-	-
Nickel 7440-02-0	NOEC/EC10 values range from 12.3 µg/l for <i>Scenedesmus accuminatus</i> to 425 µg/l for <i>Pseudokirchnerella subcapitata</i> .	The 96h LC50s values range from 0.4 mg Ni/L for <i>Pimephales promelas</i> to 320 mg Ni/L for <i>Brachydanio rerio</i> .	The 30 min EC50 of nickel for activated sludge was 33 mg Ni/L.	The 48h LC50s values range from 0.013 mg Ni/L for <i>Ceriodaphnia dubia</i> to 4970 mg Ni/L for <i>Daphnia magna</i> .

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB Assessment

No data available

12.5. Other Adverse Effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste Treatment Methods : Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	RCRA - D Series Wastes
Chromium 7440-47-3	5.0 mg/L regulatory level

This product contains one or more substances that are listed with the State of California as a hazardous waste.

SECTION 14: Transport information

Not regulated as a dangerous good per US DOT 49 CFR 171-180 or UN Dangerous Goods List.

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14.1 UN Number

Not Assigned

14.2 UN Proper Shipping Name

Not Applicable

14.3 Transport Hazard Class

Not Regulated – no hazard assigned

14.4 Packing Group

Not Applicable

14.5 Environmental Hazards

No data Available

14.6 Transport in Bulk

Not Applicable

14.7 Special Precaution for User

No Special Precautions

SECTION 15: Regulatory information

15.1. Safety, Health and Environmental regulations/legislation specific for substance or mixture

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Not Listed
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Chromium - 7440-47-3	7440-47-3	0 - 10	1.0
Copper - 7440-50-8	7440-50-8	0 - 5	1.0
Nickel - 7440-02-0	7440-02-0	0 - 0.9	0.1

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chromium 7440-47-3		X	X	
Copper 7440-50-8		X	X	
Nickel 7440-02-0		X	X	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs
Chromium 7440-47-3	5000 lb
Copper 7440-50-8	5000 lb
Nickel 7440-02-0	100 lb

US State Regulations

California Proposition 65

This product contains the Proposition 65 chemicals listed below. Proposition 65 warning label available at ATImetals.com.

Chemical Name	California Proposition 65
Nickel - 7440-02-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium 7440-32-6	X		
Aluminum 7429-90-5	X	X	X
Molybdenum 7439-98-7	X	X	X
Zirconium 7440-67-7	X	X	X
Vanadium 7440-62-2	X	X	X
Chromium 7440-47-3	X	X	X
Tin 7440-31-5	X	X	X
Copper 7440-50-8	X	X	X
Silicon 7440-21-3	X	X	X
Nickel 7440-02-0	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

SECTION 16: Other information

NFPA Rating

Health Hazard : 0

Fire Hazard: 0

Reactivity Hazard: 0

HMIS Rating

Health Hazard : 1 (Chronic health hazard)

Fire Hazard: 0

Reactivity Hazard: 0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.