1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name
Nickel-Titanium Swarf, Borings, Clippings, Shavings, Fines, Turnings (non-flammable)

Other means of identification
Product Code
SAC051

Synonyms
All non-flammable nickel-titanium scrap including swarf, borings, clippings, shavings, fines, turnings

Recommended use of the chemical and restrictions on use
Recommended Use
Alloy product manufacture.

Uses advised against

Details of the supplier of the safety data sheet
Manufacturer Address
ATI, 1000 Six PPG Place, Pittsburgh, PA 15222 USA

Emergency telephone number
Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 1</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Harmful if swallowed
May cause an allergic skin reaction
Suspected of causing cancer
Causes damage to the respiratory tract through prolonged or repeated exposure if inhaled
Harmful to aquatic life with long lasting effects
Precautionary Statements - Prevention
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wear protective gloves
Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume
Avoid release to the environment

Precautionary Statements - Response
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
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. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system. Zinc, copper, magnesium, or cadmium fumes may cause metal fume fever.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms
All non-flammable nickel-titanium scrap including swarf, borings, clippings, shavings, fines, turnings.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>7440-02-0</td>
<td>35-60</td>
</tr>
<tr>
<td>Titanium</td>
<td>7440-32-6</td>
<td>20-50</td>
</tr>
<tr>
<td>Hafnium</td>
<td>7440-58-6</td>
<td>0-40</td>
</tr>
<tr>
<td>Niobium (Columbium)</td>
<td>7440-03-1</td>
<td>0-20</td>
</tr>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>0-15</td>
</tr>
<tr>
<td>Vanadium</td>
<td>7440-62-2</td>
<td>0-10</td>
</tr>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>0-6</td>
</tr>
<tr>
<td>Boron</td>
<td>7440-42-8</td>
<td>0-1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

Eye contact
In the case of particles coming in contact with eyes during processing, treat as with any foreign object.

Skin Contact
Wash off immediately with soap and plenty of water. In the case of allergic skin reaction see a physician.

Inhalation
If excessive amounts of smoke, fume, or particulate are inhaled during processing, remove to fresh air and consult a qualified health professional.

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms and effects, both acute and delayed

**Symptoms**
May cause allergic skin reaction. May cause acute gastrointestinal effects if swallowed.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

---

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Product not flammable in the form as distributed, flammable as finely divided particles or pieces resulting from processing of this product. Isolate large fires and allow to burn out. Smother small fires with salt (NaCl) or class D dry powder fire 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.

**Specific hazards arising from the chemical**
Intense heat. Very fine, high surface area material resulting from processing this product may ignite spontaneously at room temperature. WARNING: Fine particles 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. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system. Zinc, copper, magnesium, or cadmium fumes may cause metal fume fever.

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Protective equipment and precautions for firefighters**
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Use personal protective equipment as required.

**For emergency responders**

**Environmental precautions**

**Environmental precautions**
Collect spillage to prevent release to the environment.

**Methods and material for containment and cleaning up**

**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Sweep or shovel material into dry containers. Avoid creating uncontrolled dust.

---

### 7. HANDLING AND STORAGE

**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 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.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions
Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

#### 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, freon.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

##### Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel 7440-02-0</td>
<td>TWA: 1.5 mg/m³ inhalable fraction</td>
<td>TWA: 1 mg/m³</td>
</tr>
<tr>
<td>Titanium 7440-32-6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hafnium 7440-58-6</td>
<td>TWA: 0.5 mg/m³ TWA: 0.5 mg/m³ Hf</td>
<td>TWA: 0.5 mg/m³</td>
</tr>
<tr>
<td>Niobium (Columbium) 7440-03-1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Copper 7440-50-8</td>
<td>TWA: 0.2 mg/m³ fume TWA: 1 mg/m³ Cu dust and mist</td>
<td>TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist</td>
</tr>
<tr>
<td>Vanadium 7440-62-2</td>
<td>-</td>
<td>Ceiling: 0.5 mg/m³ V2O5 respirable dust Ceiling: 0.1 mg/m³ V2O5 fume</td>
</tr>
<tr>
<td>Iron 7439-89-6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Boron 7440-42-8</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Appropriate engineering controls

##### Engineering Controls
Avoid generation of uncontrolled particles.

##### Individual protection measures, such as personal protective equipment

- **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.

- **Skin and body protection**
  Fire/flame resistant/retardant clothing may be appropriate during hot work with the product. Wear protective gloves. Cut-resistant gloves and/or protective clothing may be appropriate when sharp surfaces are present.

- **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.

- **General Hygiene Considerations**
  Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties
10. STABILITY AND REACTIVITY

Reactivity
Not applicable

Chemical stability
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Dust formation and dust accumulation.

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, freon.

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. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information**

**Inhalation**
Suspected of causing cancer if inhaled. Causes damage to the respiratory tract through prolonged or repeated exposure if inhaled.

**Eye contact**
Product not classified.

**Skin Contact**
May cause sensitization by skin contact.

**Ingestion**
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>&gt; 9000 mg/kg bw</td>
<td>-</td>
<td>&gt; 10.2 mg/L</td>
</tr>
<tr>
<td>Titanium</td>
<td>&gt; 5000 mg/kg bw</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hafnium</td>
<td>&gt; 5000 mg/kg bw</td>
<td>-</td>
<td>&gt; 4.3mg/L</td>
</tr>
<tr>
<td>Niobium (Columbium)</td>
<td>&gt; 10,000 mg/kg bw</td>
<td>&gt; 2000 mg/kg bw</td>
<td>-</td>
</tr>
<tr>
<td>Copper</td>
<td>481 mg/kg bw</td>
<td>&gt; 2000 mg/kg bw</td>
<td>&gt; 5.11 mg/L</td>
</tr>
<tr>
<td>Vanadium</td>
<td>&gt; 2000 mg/kg bw</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Iron</td>
<td>98,600 mg/kg bw</td>
<td>-</td>
<td>&gt; 0.25 mg/L</td>
</tr>
<tr>
<td>Boron</td>
<td>&gt; 2000 mg/kg bw</td>
<td>-</td>
<td>&gt; 5.08 mg/L</td>
</tr>
</tbody>
</table>

#### Information on toxicological effects

**Symptoms**
May cause sensitization by skin contact. May cause acute gastrointestinal effects if swallowed.

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

**Acute toxicity**
Harmful if swallowed.

**Skin corrosion/irritation**
Product not classified.

**Serious eye damage/eye irritation**
Product not classified.

**Germ cell mutagenicity**
Product not classified.

**Carcinogenicity**
May cause cancer by inhalation.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>Group 1</td>
<td>Group 2B</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boron</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
Product not classified.

**STOT - single exposure**
Product not classified.

**STOT - repeated exposure**
Causes disorder and damage to the: Respiratory System.

**Aspiration hazard**
Product not classified.

### 12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT.
Ecotoxicity

This product as shipped is classified for aquatic chronic toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel 7440-02-0</td>
<td>NOEC/EC10 values range from 12.3 μg/l for Scenedesmus acuminatus to 425 μg/l for Pseudokirchneriella subcapitata</td>
<td>The 96h LC50s values range from 0.4 mg Ni/L for Pimephales promelas to 320 mg Ni/L for Brachydanio rerio.</td>
<td>The 30 min EC50 of nickel for activated sludge was 33 mg Ni/L.</td>
<td>The 48h LC50s values range from 0.013 mg Ni/L for Ceriodaphnia dubia to 4970 mg Ni/L for Daphnia Magna.</td>
</tr>
<tr>
<td>Titanium 7440-32-6</td>
<td>The 72 h EC50 of titanium dioxide to Pseudokirchneriella subcapitata was 61 mg of TiO2/L.</td>
<td>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.</td>
<td>The 3 h EC50 of titanium dioxide for activated sludge were greater than 1000 mg/L.</td>
<td>The 48 h EC50 of titanium dioxide to Daphnia Magna was greater than 1000 mg of TiO2/L.</td>
</tr>
<tr>
<td>Hafnium 7440-58-6</td>
<td>The 72 h EC50 of hafnium to Pseudokirchneriella subcapitata was greater than 8 ug of Hf/L (100% saturated solution).</td>
<td>The 96 h LC50 of Hafnium dioxide in water to Danio rerio was greater than the solubility limit of 0.007 mg Hf/L.</td>
<td>-</td>
<td>The 48 h EC50 of Hafnium dioxide to Daphnia magna was greater than the solubility limit of 0.007 mg Hf/L.</td>
</tr>
<tr>
<td>Niobium (Columbium) 7440-03-1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Copper 7440-50-8</td>
<td>The 72 h EC50 values of copper chloride to Pseudokirchneriella subcapitata ranged between 30 μg/L (pH 7.02, hardness 250 mg/L CaCO3, DOC 1.95 mg/L) and 624 μg/L (pH 6.22, hardness 100 mg/L CaCO3, DOC 15.8 mg/L).</td>
<td>The 96-hr LC50 for Pimephales promelas exposed to Copper sulfate ranged from 256.2 to 38.4 ug/L with water hardness increasing from 45 to 255.7 mg/L.</td>
<td>The 24 h NOEC of copper chloride for activated sludge ranged from 0.32 to 0.64 mg of Cu/L.</td>
<td>The 48 h LC50 values for Daphnia magna exposed to copper in natural water ranged between 33.8 μg/L (pH 6.1, hardness 12.4 mg/L CaCO3, DOC 2.34 mg/L) and 792 μg/L (pH 7.35, hardness 139.7 mg/L CaCO3, DOC 22.8 mg/L.</td>
</tr>
<tr>
<td>Vanadium 7440-62-2</td>
<td>The 72 h EC50 of vanadium pentoxide to Desmodesmus subspicatus was 2,907 μg of V/L.</td>
<td>The 96 h LC50 of vanadium pentoxide to Pimephales promelas was 1,850 μg of V/L.</td>
<td>The 3 h EC50 of sodium metavanadate for activated sludge was greater than 100 mg/L.</td>
<td>The 48 h EC50 of sodium vanadate to Daphnia magna was 2,661 μg of V/L.</td>
</tr>
<tr>
<td>Iron 7439-89-6</td>
<td>-</td>
<td>The 96 h LC50 of 50% iron oxide black in water to Danio rerio was greater than 10,000 mg/L.</td>
<td>The 3 h EC50 of iron oxide for activated sludge was greater than 10,000 mg/L.</td>
<td>The 48 h EC50 of iron oxide to Daphnia magna was greater than 100 mg/L.</td>
</tr>
<tr>
<td>Boron 7440-42-8</td>
<td>The 72-h EC50 value for reduction of biomass of Pseudokirchneriella subcapitata exposed to Boric acid at pH 7.5 to 8.3 was 40.2 mg/L.</td>
<td>The 96-hr LC50 for Pimephales promelas exposed to Boric acid (82%)/borax (18%) mixture was 79.7 mg/L with water hardness of 91 mg/L and water pH of 8.0.</td>
<td>The 3 h NOEC of boric acid for activated sludge ranged from 17.5 to 20 mg/L.</td>
<td>The 48-hr LC50 for Ceriodaphnia dubia exposed to Boric acid/borax mixture ranged from 91 to 165 mg/L with pH ranging from 6.7 to 8.4.</td>
</tr>
</tbody>
</table>

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.
This product contains one or more substances that are listed with the State of California as a hazardous waste.

### 14. TRANSPORT INFORMATION

**DOT**  
Regulated, if transported in bulk or by vessel  

**Proper shipping name**  
UN/ID No. 3077 Environmentally hazardous substance, solid, n.o.s. (nickel/copper alloy powder)  

**Hazard Class**  
9  

**Packing Group**  
III  

**Special Provisions**  
8, 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33  

**Marine pollutant**  
This product contains a chemical which is listed as a severe marine pollutant according to DOT.  

**Description**  
Severe Marine Pollutant: Copper metal powder  

**Emergency Response Guide Number**  
Follow Emergency Response Guidebook, Guide No. 171, EXCEPT for FIRE follow  

### 15. REGULATORY INFORMATION

**International Inventories**  
- **TSCA**  
  - Complies  
- **DSL/NDSL**  
  - Complies  
- **EINECS/ELINCS**  
  - Complies  
- **ENCS**  
  - Complies  
- **IECSC**  
  - Complies  
- **KECL**  
  - Complies  
- **PICCS**  
  - Not Listed  
- **AICS**  
  - Not Listed  

**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: Chromium (Cr)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel - 7440-02-0</td>
<td>7440-02-0</td>
<td>35-60</td>
<td>0.1</td>
</tr>
<tr>
<td>Copper - 7440-50-8</td>
<td>7440-50-8</td>
<td>0-15</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

- **Acute health hazard**: Yes  
- **Chronic Health Hazard**: Yes  
- **Fire hazard**: No  
- **Sudden release of pressure hazard**: No  
- **Reactive Hazard**: No

**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**
--- | --- | --- | --- | ---
Nickel 7440-02-0 | | X | X | 
Copper 7440-50-8 | | 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)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel 7440-02-0</td>
<td>100 lb</td>
</tr>
<tr>
<td>Copper 7440-50-8</td>
<td>5000 lb</td>
</tr>
</tbody>
</table>

**US State Regulations**

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel - 7440-02-0</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel 7440-02-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Titanium 7440-32-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hafnium 7440-58-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Copper 7440-50-8</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Vanadium 7440-62-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**

EPA Pesticide Registration Number: Not applicable

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### 16. OTHER INFORMATION

**NFPA**

- Health hazards 1
- Flammability 0
- Instability 0
- Physical and Chemical Properties

**HMIS**

- Health hazards 2*
- Flammability 1
- Physical hazards 0
- Personal protection X

* = Chronic Health Hazard

Issue Date: 12-Nov-2019
Revision Date: 12-Nov-2019
Revision Note: New Safety Data Sheet

**Note:**
The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Additional information available from: Safety data sheets and labels available at ATImetals.com

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End of Safety Data Sheet