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

GHS product identifier

Product Name Chromium-Manganese and Chromium-Nickel-Manganese Alloved Stainless Steel grades

Other means of identification

Synonyms 904L, 201, 218, 307, LDX 2101®, and N60. This includes all listed grades with letter prefixes and suffixes as well as PRODEC® suffix.

Recommended use of the chemical and restrictions on use

Recommended Use Solid stainless steel products, various forms, and uses

Uses advised against No information available

Supplier's details

Supplier Address

Outokumpu Stainless Bar, LLC
3043 Crenshaw Parkway
Richburg, SC 29729
TEL: 1-888-458-4600; 1-803-789-5383

Outokumpu Stainless USA, LLC
One Steel Drive
Calvert, AL 36513
TEL: 1-251-829-3600

Outokumpu Mexinox S.A de C.V
AV. Industrias No. 4100
Zona Industrial 1a. Sección
78395, San Luis Potosi, México
TEL: +52+444+826-5100

Emergency telephone number

Emergency Telephone Number 251-829-3600

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Solid metallic products are generally classified as “articles” and do not constitute hazardous materials in solid form. However, downstream use of the article could result in some hazardous elements contained in these products to be emitted under certain processing conditions such as but not limited to: burning, melting, cutting, sawing, brazing, grinding, machining, milling, and welding. The classification given below pertains to these alloys when used during these processes.
Acute Oral Toxicity  Category 4
Respiratory Sensitization Category 1
Skin Sensitization Category 1
Carcinogenicity Category 1A
Specific Target Organ Toxicity (Repeated Exposure) Category 1

Acute Oral Toxicity: Category 4
Respiratory Sensitization: Category 1
Skin Sensitization: Category 1
Carcinogenicity: Category 1A
Specific Target Organ Toxicity (Repeated Exposure): Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word: Danger

Hazard Statements:
- Harmful if swallowed
- Causes mild skin irritation
- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- May cause an allergic skin reaction
- May cause cancer
- Causes damage to organs through prolonged or repeated exposure

Appearance: Varying from dull very light grey, to shiny metallic light grey to bright mirror-finish
Physical State: Solid
Odor: Odorless

Precautionary Statements

Prevention:
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- In case of inadequate ventilation wear respiratory protection
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves
- Do not breathe dust/fume/gas/mist/vapors/spray

General Advice:
- IF exposed or concerned: Get medical attention/advice

Skin:
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse

Inhalation:
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Ingestion:
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms
904L, 201, 218, 307, LDX 2101®, and N60. This includes all listed grades with letter prefixes and suffixes as well as PRODEC® suffix.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>Balance</td>
<td>*</td>
</tr>
<tr>
<td>Nickel</td>
<td>7440-02-0</td>
<td>1.3-28</td>
<td>*</td>
</tr>
<tr>
<td>Chromium</td>
<td>7440-47-3</td>
<td>16-22</td>
<td>*</td>
</tr>
<tr>
<td>Manganese</td>
<td>7439-96-5</td>
<td>4-9</td>
<td>*</td>
</tr>
<tr>
<td>Silicon</td>
<td>7440-21-3</td>
<td>0-4.5</td>
<td>*</td>
</tr>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>0-1.7</td>
<td>*</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>7439-98-7</td>
<td>0-1</td>
<td>*</td>
</tr>
<tr>
<td>Cobalt</td>
<td>7440-48-4</td>
<td>0-0.6</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice
In its solid form stainless steel does not present an inhalation, absorption, or ingestion hazard. Grinding, polishing, abrasive blasting, hot rolling, hot forging, thermal cutting, or welding may produce stainless steel dust or fumes containing complex or mixed oxides (spinels) of its components. Metal dust particles may cause eye, skin and/or respiratory system irritation. The below information is for these instances.

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

Inhalation
Move to fresh air. If breathing is difficult, give oxygen. Consult a physician.

Ingestion
Not an expected route of exposure. If swallowed: Get medical attention.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects
Coughing and/or wheezing. Difficulty in breathing. Irritation. May cause allergic skin reaction.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician
May cause sensitization by inhalation and skin contact. Treat symptomatically.

5. FIRE-FIGHTING MEASURES
### Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**  None

### Specific Hazards Arising from the Chemical
Avoid dust formation. Dusts or fumes may form explosive mixtures in air. May cause sensitization by inhalation and skin contact.

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

### Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### Personal Precautions
Avoid dust formation. Avoid inhalation of dust. Ensure adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

#### Environmental Precautions
Not applicable to steel in solid state. Follow applicable federal, state and local regulations. Avoid release to the environment. Collect spillage. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

### Methods and materials for containment and cleaning up

#### Methods for Containment
Prevent further leakage or spillage if safe to do so. Cover dust spill with plastic sheet or tarp to minimize spreading.

#### Methods for Cleaning Up
Take up mechanically and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product.

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

#### Storage
Store in accordance with local regulations.

#### Incompatible Products
May react in contact with strong acids to release gaseous acid decomposition products, e.g. hydrogen, oxides of nitrogen. Use of strong oxidizers (high pH) on stainless steel may cause Cr(VI) compounds to form at ambient temperatures. Decomposition: Fumes generated during welding, brazing, or thermal cutting may contain: chromium compounds, including hexavalent chromium Cr(VI); nickel; manganese; iron; molybdenum; and silicon compounds.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Control parameters

Exposure Guidelines

There are no occupational exposure limits for stainless steels. Occupational exposure limits apply to some components resulting from grinding, polishing, abrasive blasting, hot rolling, hot forging, thermal cutting, or welding which may produce stainless steel dust or fumes.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>TWA: 1.5 mg/m³</td>
<td>TWA: 1 mg/m³ (vacated) TWA: 1 mg/m³</td>
<td>IDLH: 10 mg/m³ TWA: 0.015 mg/m³</td>
</tr>
<tr>
<td>Manganese</td>
<td>TWA: 0.2 mg/m³</td>
<td>(vacated) TWA: 1 mg/m³ fume (vacated) STEL: 3 mg/m³ fume (vacated) Ceiling: 5 mg/m³ fume</td>
<td>IDLH: 500 mg/m³ TWA: 1 mg/m³ fume STEL: 3 mg/m³</td>
</tr>
<tr>
<td>Silicon</td>
<td>-</td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust</td>
</tr>
<tr>
<td>Copper</td>
<td>TWA: 0.2 mg/m³ fume</td>
<td>TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist</td>
<td>IDLH: 100 mg/m³ dust, fume and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ dust and fume</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>TWA: 10 mg/m³ inhalable fraction TWA: 3 mg/m³ respirable fraction</td>
<td>(vacated) TWA: 10 mg/m³</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td>Cobalt</td>
<td>TWA: 0.02 mg/m³</td>
<td>TWA: 0.1 mg/m³ dust and fume (vacated) TWA: 0.05 mg/m³ dust and fume</td>
<td>IDLH: 20 mg/m³ dust and fume TWA: 0.05 mg/m³ dust and fume</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Measures

Ensure adequate ventilation, especially in confined area (i.e. showers, eyewash stations, etc.).

Individual protection measures, such as personal protective equipment

Eye/Face Protection

When processing the metal alloy wear: Tightly fitting safety goggles.

Skin and Body Protection

When processing the metal alloy: Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA 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.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ - Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Varying from dull very light grey, to shiny metallic light grey to bright mirror-finish</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
<td>Odor Threshold</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>1370-1520 °C / 2498-2768 °F</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>
## Flammability Limits in Air

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
</tr>
</tbody>
</table>

## Vapor Pressure

No data available

## Relative Density

No data available

## Specific Gravity

No data available

## Water Solubility

No data available

## Solubility in other solvents

No data available

## Partition coefficient: n-octanol/water

No data available

## Autoignition Temperature

No data available

## Decomposition Temperature

No data available

## Viscosity

No data available

## Relative Density

No data available

## Specific Gravity

No data available

## Water Solubility

No data available

## Solubility in other solvents

No data available

## Partition coefficient: n-octanol/water

No data available

## Autoignition Temperature

No data available

## Decomposition Temperature

No data available

## Viscosity

No data available

## Flammable Properties

Not flammable

## Explosive Properties

No data available

## Oxidizing Properties

No data available

## Other information

VOC Content (%)

No data available

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

**Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

None under normal processing.

#### Conditions to avoid

Dust formation.

**Incompatible materials**

May react in contact with strong acids to release gaseous acid decomposition products, e.g. hydrogen, oxides of nitrogen. Use of strong oxidizers (high pH) on stainless steel may cause Cr(VI) compounds to form at ambient temperatures. Decomposition: Fumes generated during welding, brazing, or thermal cutting may contain: chromium compounds, including hexavalent chromium Cr(VI); nickel; manganese; iron; molybdenum; and silicon compounds.

**Hazardous decomposition products**

None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information**

In its solid form stainless steel does not present an inhalation, absorption, or ingestion hazard. Grinding, polishing, abrasive blasting, hot rolling, hot forging, thermal cutting, or welding may produce stainless steel dust or fumes containing complex or mixed oxides (spinels) of its components. Metal dust particles may cause eye, skin and/or respiratory system irritation. The below information is for these instances.
Inhalation May cause irritation of respiratory tract. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Eye Contact Contact with eyes may cause irritation.

Skin Contact Contact with dust can cause mechanical irritation or drying of the skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion May cause irritation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (mg/kg)</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>= 984 (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nickel</td>
<td>&gt; 8000 (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manganese</td>
<td>= 9 (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silicon</td>
<td>= 3160 (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cobalt</td>
<td>= 6170 (Rat)</td>
<td>-</td>
<td>&gt; 10 (Rat) 1h</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization May cause sensitization by inhalation and skin contact

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

<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></td>
<td>Group 2B</td>
<td>Group 1</td>
<td>X</td>
</tr>
<tr>
<td>Chromium</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cobalt</td>
<td>A3</td>
<td>Group 2A</td>
<td>Group 2B</td>
<td>X</td>
</tr>
</tbody>
</table>

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Chronic Toxicity Elevated temperature processing such as welding and plasma arc cutting may release hazardous fumes. Overexposure to metal fumes may cause pulmonary edema (fluid in the lungs) and methemoglobinemia. May also cause pulmonary fibrosis and lung cancer. Chronic exposure to manganese may cause impairment to the central nervous system including sluggishness, sleepiness, muscle weakness, loss of facial muscle control, edema, emotional disturbances, spastic gait, and failing.

Target Organ Effects Respiratory system. Skin.

Aspiration Hazard No information available.

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 1214 mg/kg; Acute toxicity estimate 7500

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>-</td>
<td>LC50 96 h: = 0.56 mg/L semi-static (Cyprinus carpio)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 96 h: = 13.6 mg/L static (Morone saxatilis)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nickel

EC50 96 h: 0.174 - 0.311 mg/L static (Pseudokirchneriella subcapitata)
EC50 72 h: 0.18 mg/L static (Pseudokirchneriella subcapitata)

LC50 96 h: 1.3 mg/L semi-static (Cyprinus carpio)
LC50 96 h: 10.4 mg/L static (Cyprinus carpio)
LC50 96 h: > 100 mg/L (Brachydanio rerio)

Copper

EC50 96 h: 0.031 - 0.054 mg/L static (Pseudokirchneriella subcapitata)
EC50 72 h: 0.0426 - 0.0535 mg/L static (Pseudokirchneriella subcapitata)

LC50 96 h: 0.0068 - 0.0156 mg/L (Pimephales promelas)
LC50 96 h: < 0.3 mg/L static (Pimephales promelas)
LC50 96 h: 0.052 mg/L flow-through (Oncorhynchus mykiss)

EC50 48 h: > 100 mg/L Static (Daphnia magna)

Cobalt

LC50 96 h: > 100 mg/L static (Brachydanio rerio)

Persistence and Degradability
No information available.

Bioaccumulation
No information available.

Other Adverse Effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Recover or recycle if possible. Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging
Dispose of in accordance with federal, state, and local regulations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel - 7440-02-0</td>
<td>Including in waste streams: F006, F039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium - 7440-47-3</td>
<td>Including in waste streams: F032, F034, F035, F037, F038, F039</td>
<td>5.0 mg/L regulatory level</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>Toxic powder</td>
</tr>
<tr>
<td></td>
<td>Ignitible powder</td>
</tr>
<tr>
<td>Chromium</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
<tr>
<td></td>
<td>Ignitible</td>
</tr>
<tr>
<td>Manganese</td>
<td>Ignitible powder</td>
</tr>
<tr>
<td>Copper</td>
<td>Toxic</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>Ignitible powder</td>
</tr>
<tr>
<td>Cobalt</td>
<td>Toxic powder</td>
</tr>
<tr>
<td></td>
<td>Ignitible</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>DSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies</td>
<td>Complies</td>
</tr>
</tbody>
</table>

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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:

<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>Chromium</td>
<td>7440-47-3</td>
<td>16.22</td>
<td>1.0</td>
</tr>
<tr>
<td>Manganese</td>
<td>7439-96-5</td>
<td>4.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Nickel</td>
<td>7440-02-0</td>
<td>1.3-28</td>
<td>0.1</td>
</tr>
<tr>
<td>Cobalt</td>
<td>7440-48-4</td>
<td>0.06</td>
<td>0.1</td>
</tr>
</tbody>
</table>

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

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):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>100 lb</td>
<td></td>
<td>RQ 100 lb final RQ RQ 45.4 kg final RQ</td>
</tr>
<tr>
<td>Chromium</td>
<td></td>
<td></td>
<td>RQ 5000 lb final RQ RQ 2270 kg final RQ</td>
</tr>
<tr>
<td>Copper</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>California Prop. 65</th>
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</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>
<th>Illinois</th>
<th>Rhode Island</th>
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<tbody>
<tr>
<td>Chromium</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Manganese</td>
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<td>X</td>
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<tr>
<td>Nickel</td>
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<tr>
<td>Silicon</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Molybdenum</td>
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<tr>
<td>Cobalt</td>
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<td>X</td>
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<td>X</td>
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<tr>
<td>Titanium</td>
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U.S. EPA Label Information
EPA Pesticide Registration Number  Not applicable

16. OTHER INFORMATION

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<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
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<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
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Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date
26-Nov-2012

Revision Date
04-Mar-2013

Revision Note
Change to classification, Change to composition. (M)SDS sections updated: 1, 2, 3, 15.

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End of Safety Data Sheet