

SAFETY DATA SHEET

1. Identification

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|---|---|----------------|
| Product identifier | Pickled and Oiled Steel Coils, Sheet, and Plate | |
| Other means of identification | Not available. | |
| Synonyms | Carbon Steel Sheet/Strip and Skelp * Carbon Steel * HSLA Steel * Alloy Steel | |
| Recommended use | Industrial use. As supplied, the product is expected to pose no immediate health or fire hazard. Dusts or fumes generated during subsequent remanufacturing may pose the hazards described in this Material Safety Data Sheet. | |
| Recommended restrictions | None known. | |
| Manufacturer / Importer / Supplier / Distributor information | | |
| Company name | Cargill Ferrous International | |
| Address | 21 Waterway Ave. Ste. 525 Woodlands, Tx. 77388 US | |
| Telephone | General Information: | 1-800-992-1083 |
| E-mail | Not available. | |
| Emergency phone number | 24-Hour Emergency: | 1-800-262-8200 |

2. Hazard(s) identification

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|------------------------------|--|-----------------------------|
| Physical hazards | Not classified. | |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2B |
| | Sensitization, skin | Category 1 |
| | Carcinogenicity | Category 2 |
| | Reproductive toxicity | Category 1B |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| | Specific target organ toxicity, repeated exposure | Category 1 (Blood, kidney) |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 1 |
| OSHA defined hazards | Combustible dust | |

Label elements



Signal word Danger

Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. May form combustible dust concentrations in air.

Precautionary statement
Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Ground/bond container and receiving equipment. Do not breathe dust. Avoid breathing dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Prevent dust accumulation to minimize explosion hazard.

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| Response | If exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center/doctor. Take off contaminated clothing and wash before reuse. Collect spillage. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | As supplied, the product is expected to pose no immediate health or fire hazard. Dusts or fumes generated during subsequent remanufacturing may pose the hazards described in this Material Safety Data Sheet. |

3. Composition/information on ingredients

Substances

| Chemical name | Common name and synonyms | CAS number | % |
|---------------|--------------------------|------------|---------|
| Iron | | 7439-89-6 | >86 |
| Chromium | | 7440-47-3 | 0 - 5 |
| Nickel | | 7440-02-0 | 0 - 5 |
| Manganese | | 7439-96-5 | 0 - 3 |
| Copper | | 7440-50-8 | 0 - 2.5 |
| Molybdenum | | 7439-98-7 | 0 - 2.5 |
| Aluminum | | 7429-90-5 | 0 - 2 |
| Silicon | | 7440-21-3 | 0 - 2 |

Composition comments This product is coated in a thin layer of oils to prevent oxidation. The oils are not expected to pose any health hazards.

4. First-aid measures

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| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately. Move person to fresh air. |
| Skin contact | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. If skin irritation or rash occurs: Get medical advice/attention. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Get medical attention if irritation develops and persists. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist. |
| Ingestion | Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Not relevant, due to the form of the product. |
| Most important symptoms/effects, acute and delayed | Irritation of eyes and mucous membranes. May cause allergic skin reaction. May cause allergic respiratory reaction. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse. First aid is not normally required due to the form of the product. Advice is supplied for dust or fumes that may be generated in remanufacturing. |

5. Fire-fighting measures

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| Suitable extinguishing media | Apply extinguishing media carefully to avoid creating airborne dust. |
| Unsuitable extinguishing media | Carbon dioxide (CO ₂). Do not use water on molten metal: Explosion hazard could result. |

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| Specific hazards arising from the chemical | Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. Dust may form explosive mixture with air. |
| Special protective equipment and precautions for firefighters | Not available. |
| Fire-fighting equipment/instructions | Water runoff can cause environmental damage. Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire. |
| General fire hazards | No unusual fire or explosion hazards noted. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Use only non-sparking tools. Keep people away from and upwind of spill/leak. Keep out of low areas. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate personal protective equipment (See Section 8). |
| Methods and materials for containment and cleaning up | Minimize dust generation and accumulation. Collect spillage. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Prevent entry into waterways, sewer, basements or confined areas. Sweep or scoop up and remove. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Nonsparking tools should be used. |
| Environmental precautions | Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. |

7. Handling and storage

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|---|---|
| Precautions for safe handling | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all sources of ignition. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Do not breathe dust. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. Do not breathe fumes and dusts. |
| Conditions for safe storage, including any incompatibilities | Store locked up. Keep away from heat, sparks and open flame. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. |

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|----------------------------|---------|-----------------------|----------------------|
| Aluminum (CAS 7429-90-5) | PEL | 5 mg/m ³ | Respirable dust. |
| | | 15 mg/m ³ | Total dust. |
| Chromium (CAS 7440-47-3) | PEL | 1 mg/m ³ | |
| Copper (CAS 7440-50-8) | PEL | 1 mg/m ³ | Dust and mist. |
| | | 0.1 mg/m ³ | Fume. |
| Manganese (CAS 7439-96-5) | Ceiling | 5 mg/m ³ | Fume. |
| Molybdenum (CAS 7439-98-7) | PEL | 15 mg/m ³ | Total dust. |
| Nickel (CAS 7440-02-0) | PEL | 1 mg/m ³ | |
| Silicon (CAS 7440-21-3) | PEL | 5 mg/m ³ | Respirable fraction. |

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|------------|------|----------|-------------|
| | | 15 mg/m3 | Total dust. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|----------------------------|------|------------|----------------------|
| Aluminum (CAS 7429-90-5) | TWA | 1 mg/m3 | Respirable fraction. |
| Chromium (CAS 7440-47-3) | TWA | 0.5 mg/m3 | |
| Copper (CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| | | 0.2 mg/m3 | Fume. |
| Manganese (CAS 7439-96-5) | TWA | 0.1 mg/m3 | Inhalable fraction. |
| | | 0.02 mg/m3 | Respirable fraction. |
| Molybdenum (CAS 7439-98-7) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Inhalable fraction. |
| Nickel (CAS 7440-02-0) | TWA | 1.5 mg/m3 | Inhalable fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|---------------------------|------|-------------|------------------------------------|
| Aluminum (CAS 7429-90-5) | TWA | 5 mg/m3 | Welding fume or pyrophoric powder. |
| | | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |
| Chromium (CAS 7440-47-3) | TWA | 0.5 mg/m3 | |
| Copper (CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| Manganese (CAS 7439-96-5) | STEL | 3 mg/m3 | Fume. |
| | TWA | 1 mg/m3 | Fume. |
| Nickel (CAS 7440-02-0) | TWA | 0.015 mg/m3 | |
| Silicon (CAS 7440-21-3) | TWA | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |

| | |
|--|---|
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Exposure guidelines | No exposure standards allocated. |
| Appropriate engineering controls | If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Ensure adequate ventilation, especially in confined areas. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Provide eyewash station. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Wear a full-face respirator, if needed. |
| Skin protection | |
| Hand protection | Wear protective gloves. |
| Other | Wear appropriate chemical resistant clothing. It is good industrial hygiene practice to minimize skin contact. |
| Respiratory protection | If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Respirator type: High-efficiency particulate respirator. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

| | |
|---|-------------------------|
| Physical state | Solid. |
| Form | Powder. Sheet or strip. |
| Color | Metallic gray. |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | Not applicable. |
| Melting point/freezing point | 2750 °F (1510 °C) |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not applicable. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |

Upper/lower flammability or explosive limits

| | |
|--------------------------------|-----------------|
| Flammability limit - lower (%) | Not applicable. |
| Flammability limit - upper (%) | Not applicable. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |

| | |
|---|--------------------|
| Vapor pressure | Not applicable. |
| Vapor density | Not applicable. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Insoluble. |
| Partition coefficient (n-octanol/water) | No data available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not applicable. |
| Other information | |
| Density | 7.85 g/cm³ |

10. Stability and reactivity

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|------------------------------------|--|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Aluminum dust is spontaneously flammable in air. Contact with strong acids will release highly flammable hydrogen gas. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion. Molten aluminum may explode on contact with water, concrete, oxides of other materials or other oxidizing agents. |
| Conditions to avoid | Keep away from heat, sparks and open flame. Minimize dust generation and accumulation. Ignition sources. |
| Incompatible materials | Strong oxidizing agents. Strong acids. Calcium hypochlorite. Metal salts. |
| Hazardous decomposition products | Metal oxides. |

11. Toxicological information

Information on likely routes of exposure

| | |
|--------------|--|
| Ingestion | Based on available data, the classification criteria are not met. |
| Inhalation | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Eye contact | Causes eye irritation. |

Symptoms related to the physical, chemical and toxicological characteristics Suspected of causing cancer. Irritant effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Causes skin, eye and respiratory tract irritation.

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

Manganese (CAS 7439-96-5)

Acute

Oral

LD50

Rat

9000 mg/kg

Silicon (CAS 7440-21-3)

Acute

Oral

LD50

Rat

3160 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Chromium (CAS 7440-47-3)

3 Not classifiable as to carcinogenicity to humans.

Nickel (CAS 7440-02-0)

2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Nickel (CAS 7440-02-0)

Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity

May damage fertility or the unborn child. May damage fertility or the unborn child. May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. In a toxicity study of copper oxide by inhalation exposure to rats (Dose level: 0.01 to 1 mg/ m3, period: 90 to 100 days), inhibition of spermatogenesis, change in sperm function and testicular atrophy were observed. High-dose exposure of experimental animals during pregnancy to chromium can produce embryo death and some malformations. Human reports have not identified a syndrome of abnormalities associated with chromium exposure during pregnancy.

Specific target organ toxicity - single exposure

Narcotic effects.

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available.

Chronic effects

Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Cancer hazard - can cause cancer. Overexposure can cause lung damage. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 microns and usually between 0.02-0.05 microns from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposures and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese and copper have been associated with causing metal fume fever.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

Copper (CAS 7440-50-8)

Aquatic

Fish

LC50

Striped bass (*Morone saxatilis*)

0.024 mg/l, 96 hours

| Components | Species | Test Results |
|-------------------------------|---|--|
| Molybdenum (CAS 7439-98-7) | | |
| Aquatic | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 800 mg/l, 96 hours |
| Nickel (CAS 7440-02-0) | | |
| Aquatic | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) 2.916 mg/l, 96 hours |
| Persistence and degradability | No data available. | |
| Bioaccumulative potential | No data available. | |
| Mobility in soil | Not available. | |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. | |

13. Disposal considerations

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| Disposal instructions | This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261. |
| Hazardous waste code | Not regulated. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

| | |
|---|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not available. |

15. Regulatory information

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|---|--|
| US federal regulations | As supplied this material is considered not hazardous under 29CFR 1910.1200 (Hazard Communication) Dusts or fumes are considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated. |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. |
| CERCLA Hazardous Substance List (40 CFR 302.4) | |
| Chromium (CAS 7440-47-3) | LISTED |
| Copper (CAS 7440-50-8) | LISTED |
| Manganese (CAS 7439-96-5) | LISTED |
| Nickel (CAS 7440-02-0) | LISTED |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) | |
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| SARA 302 Extremely hazardous substance | Not listed. |

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| Chromium | 7440-47-3 | 0 - 5 |
| Nickel | 7440-02-0 | 0 - 5 |
| Manganese | 7439-96-5 | 0 - 3 |
| Copper | 7440-50-8 | 0 - 2.5 |
| Aluminum | 7429-90-5 | 0 - 2 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromium (CAS 7440-47-3)
Manganese (CAS 7439-96-5)
Nickel (CAS 7440-02-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

Aluminum (CAS 7429-90-5)
Chromium (CAS 7440-47-3)
Copper (CAS 7440-50-8)
Manganese (CAS 7439-96-5)
Molybdenum (CAS 7439-98-7)
Nickel (CAS 7440-02-0)
Silicon (CAS 7440-21-3)

US. New Jersey Worker and Community Right-to-Know Act

Aluminum (CAS 7429-90-5)
Chromium (CAS 7440-47-3)
Copper (CAS 7440-50-8)
Manganese (CAS 7439-96-5)
Molybdenum (CAS 7439-98-7)
Nickel (CAS 7440-02-0)
Silicon (CAS 7440-21-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Aluminum (CAS 7429-90-5)
Chromium (CAS 7440-47-3)
Copper (CAS 7440-50-8)
Manganese (CAS 7439-96-5)
Molybdenum (CAS 7439-98-7)
Nickel (CAS 7440-02-0)
Silicon (CAS 7440-21-3)

US. Rhode Island RTK

Aluminum (CAS 7429-90-5)
Chromium (CAS 7440-47-3)
Copper (CAS 7440-50-8)
Manganese (CAS 7439-96-5)
Nickel (CAS 7440-02-0)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Nickel (CAS 7440-02-0)

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |

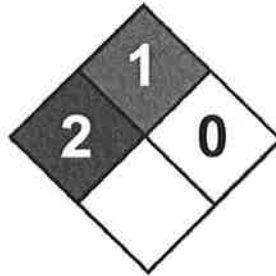
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

| | |
|---------------------|---|
| Issue date | 17-January-2014 |
| Revision date | - |
| Version # | 01 |
| Further information | Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. |
| NFPA Ratings | |



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|------------|--|
| References | <p>ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices</p> |
| Disclaimer | <p>To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.</p> |