

1. Identification

| | | | |
|---|---|--------------|--|
| Product identifier | COMANCHE | | |
| Other means of identification | | | |
| Brand Code | 8200, 739A, 897B | | |
| Recommended use | For Industrial Use Only | | |
| Recommended restrictions | Avoid dry cutting, blasting, or dust generation. | | |
| Manufacturer/Importer/Supplier/Distributor information | | | |
| Manufacturer | | | |
| Company name | HarbisonWalker International | | |
| Address | 1305 Cherrington Parkway, Suite 100 Moon Township Pennsylvania 15108 US | | |
| Telephone | General Phone: | 412-375-6600 | |
| Website | www.thinkHWI.com | | |
| Emergency phone number | Not available. | | |
| Supplier | Not available. | | |

2. Hazard identification

Classified hazards

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not Classified as hazardous. However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. Wear protective gloves/protective clothing/eye protection.

Label elements

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not Classified as hazardous. However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. Wear protective gloves/protective clothing/eye protection.

Other hazards

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not Classified as hazardous. However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. Wear protective gloves/protective clothing/eye protection.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------|--|------------|-----------|
| ALPHA-ALUMINA | | 1344-28-1 | 60 - 80 |
| ALUMINUM, ELEMENTAL | | 7429-90-5 | 2.5 - 10 |
| Graphite | | 7782-42-5 | 2.5 - 10 |
| MAGNESIUM OXIDE | | 1309-48-4 | 2.5 - 10 |
| SILICA, AMORPHOUS, FUMED | Fumed Silica Silica, crystalline free | 7631-86-9 | 2.5 - 10 |
| Titanium Dioxide | | 13463-67-7 | 2.5 - 10 |
| CARBON BLACK | | 1333-86-4 | 1 - 2.5 |
| FERRIC OXIDE | | 1309-37-1 | 1 - 2.5 |
| PHENOL | | 108-95-2 | 0.1 - 2.5 |

| Chemical name | Common name and synonyms | CAS number | % |
|-----------------------------------|--------------------------|------------|-----------|
| SILICA, CRYSTALLINE, CRISTOBALITE | | 14464-46-1 | 0.1 - 2.5 |

Other components below reportable levels 10 - 25

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse aggregate or as part of the clays or sands.

4. First-aid measures

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|---|--|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |

5. Fire-fighting measures

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|--|---|
| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. |
| Unsuitable extinguishing media | Not available. |
| Specific hazards arising from the chemical | Not applicable. |
| Special protective equipment and precautions for firefighters | Not available. |

6. Accidental release measures

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|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |

7. Handling and storage

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|---|---|
| Precautions for safe handling | Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|-------------------------------------|------|----------------------|----------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 1 mg/m ³ | Respirable fraction. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 1 mg/m ³ | Respirable fraction. |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3 mg/m ³ | Inhalable fraction. |
| FERRIC OXIDE (CAS 1309-37-1) | TWA | 5 mg/m ³ | Respirable fraction. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m ³ | Respirable fraction. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | TWA | 10 mg/m ³ | Inhalable fraction. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--|------|-------------------------|----------------------|
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.025 mg/m ³ | Respirable fraction. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ | |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value | Form |
|--|------|-------------------------|-----------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 10 mg/m ³ | |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 5 mg/m ³ | Pyrophoric powder. |
| | | 10 mg/m ³ | Dust. |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3.5 mg/m ³ | |
| FERRIC OXIDE (CAS 1309-37-1) | TWA | 5 mg/m ³ | Respirable. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m ³ | Respirable. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | TWA | 10 mg/m ³ | Fume. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.025 mg/m ³ | Respirable particles. |
| | | 0.025 mg/m ³ | Respirable. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | 10 mg/m ³ | |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value | Form |
|--|------|-------------------------|------------------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 1 mg/m ³ | Respirable. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 1 mg/m ³ | Respirable. |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3 mg/m ³ | Inhalable |
| FERRIC OXIDE (CAS 1309-37-1) | STEL | 10 mg/m ³ | Fume. |
| | TWA | 5 mg/m ³ | Dust. |
| | | 5 mg/m ³ | Fume. |
| | | 3 mg/m ³ | Respirable fraction. |
| | | 10 mg/m ³ | Total dust. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m ³ | Respirable. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | STEL | 10 mg/m ³ | Respirable dust and/or fume. |
| | TWA | 3 mg/m ³ | Respirable dust and/or fume. |
| | | 10 mg/m ³ | Inhalable fume. |
| SILICA, AMORPHOUS, FUMED (CAS 7631-86-9) | TWA | 4 mg/m ³ | Total |
| | | 1.5 mg/m ³ | Respirable. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.025 mg/m ³ | Respirable fraction. |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value | Form |
|-----------------------------------|------|----------|----------------------|
| Titanium Dioxide (CAS 13463-67-7) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Total dust. |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components | Type | Value | Form |
|--|------|-------------|----------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 1 mg/m3 | Respirable fraction. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 1 mg/m3 | Respirable fraction. |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3 mg/m3 | Inhalable fraction. |
| FERRIC OXIDE (CAS 1309-37-1) | TWA | 5 mg/m3 | Respirable fraction. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | TWA | 10 mg/m3 | Inhalable fraction. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.025 mg/m3 | Respirable fraction. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | 10 mg/m3 | |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value | Form |
|--|------|------------|----------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 1 mg/m3 | Respirable fraction. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 1 mg/m3 | Respirable fraction. |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3 mg/m3 | Inhalable fraction. |
| FERRIC OXIDE (CAS 1309-37-1) | TWA | 5 mg/m3 | Respirable fraction. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | TWA | 10 mg/m3 | Inhalable fraction. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.05 mg/m3 | Respirable fraction. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | 10 mg/m3 | |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value | Form |
|-------------------------------------|------|-----------|------------------|
| ALPHA-ALUMINA (CAS 1344-28-1) | TWA | 10 mg/m3 | Total dust. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | TWA | 5 mg/m3 | Welding fume. |
| | | 10 mg/m3 | |
| CARBON BLACK (CAS 1333-86-4) | TWA | 3.5 mg/m3 | |
| FERRIC OXIDE (CAS 1309-37-1) | TWA | 5 mg/m3 | Dust and fume. |
| | | 10 mg/m3 | Total dust. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable dust. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | TWA | 10 mg/m3 | Fume. |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value | Form |
|--|------|------------|------------------|
| SILICA, AMORPHOUS, FUMED (CAS 7631-86-9) | TWA | 6 mg/m3 | Respirable dust. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | TWA | 0.05 mg/m3 | Respirable dust. |
| Titanium Dioxide (CAS 13463-67-7) | TWA | 10 mg/m3 | Total dust. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
The resin binder in this product was specifically engineered to have low toxicity, with minimal free-phenol (less than 100ppm in this refractory product) and no free-formaldehyde. Under certain conditions, thermal decomposition products may still include carbon monoxide, carbon dioxide, formaldehyde, phenol and aromatic and/or aliphatic compounds.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing.

Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.



General hygiene considerations

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.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Brick or Cast Shape Solid.

Color

Not available.

Odor

Not available.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

| | |
|--|----------------|
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |

10. Stability and reactivity

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 No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Refractories containing crystalline silica may, after service, contain more or less crystalline silica. Care must be taken to avoid and/or control dust from demolition. If in doubt of the proper protection, seek advice from a safety professional.

The organic binder in this product falls into a class known as phenolic resin. Refractory products using this type of binder are supplied in two forms, (1) shaped products such as brick and (2) monolithics/specialties such as refractory plastics and rams. The hazards associated with phenolic resin are different in the two forms. For pre-cured shapes (brick), the binder has been reacted or polymerized by heat to its solid form prior to shipment. On decomposition by heating, where there is sufficient air and heating rate, the gaseous products are mostly carbon dioxide and water. Under low or limited oxygen supply, decomposition products during heat-up and early service may include phenol, as well as aromatic and/or aliphatic derivatives. After a campaign in service, this refractory product should be completely coked and in that condition the material for disposal would be carbon and an inorganic oxide. During field installation of non-cured unshaped products (monolithics), there is a possibility of exposure to trace amounts of phenol by skin contact and inhalation. After the product has been heated to high temperatures in service, it will have similar decomposition characteristics to pre-cured shapes.

Incompatible materials Strong oxidizing agents. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|--|
| Inhalation | No adverse effects due to inhalation are expected. |
| Skin contact | No adverse effects due to skin contact are expected. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Ingestion | Expected to be a low ingestion hazard. |

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Not available. |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

| | |
|--|----------|
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | Irritant |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | Irritant |
| Titanium Dioxide (CAS 13463-67-7) | Irritant |

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

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

Carcinogenicity In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

ACGIH Carcinogens

| | |
|--|--|
| ALPHA-ALUMINA (CAS 1344-28-1) | A4 Not classifiable as a human carcinogen. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | A4 Not classifiable as a human carcinogen. |
| CARBON BLACK (CAS 1333-86-4) | A3 Confirmed animal carcinogen with unknown relevance to humans. |
| FERRIC OXIDE (CAS 1309-37-1) | A4 Not classifiable as a human carcinogen. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | A4 Not classifiable as a human carcinogen. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | A2 Suspected human carcinogen. |
| Titanium Dioxide (CAS 13463-67-7) | A4 Not classifiable as a human carcinogen. |

Canada - Alberta OELs: Carcinogen category

| | |
|--|-----------------------------|
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | Suspected human carcinogen. |
|--|-----------------------------|

Canada - Manitoba OELs: carcinogenicity

| | |
|--|---|
| ALPHA-ALUMINA (CAS 1344-28-1) | Not classifiable as a human carcinogen. |
| ALUMINUM, ELEMENTAL (CAS 7429-90-5) | Not classifiable as a human carcinogen. |
| CARBON BLACK (CAS 1333-86-4) | Confirmed animal carcinogen with unknown relevance to humans. |
| FERRIC OXIDE (CAS 1309-37-1) | Not classifiable as a human carcinogen. |
| MAGNESIUM OXIDE (CAS 1309-48-4) | Not classifiable as a human carcinogen. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | Suspected human carcinogen. |
| Titanium Dioxide (CAS 13463-67-7) | Not classifiable as a human carcinogen. |

Canada - Quebec OELs: Carcinogen category

| | |
|--|--|
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | Detected carcinogenic effect in animals. |
|--|--|

IARC Monographs. Overall Evaluation of Carcinogenicity

| | |
|--|---|
| CARBON BLACK (CAS 1333-86-4) | 2B Possibly carcinogenic to humans. |
| FERRIC OXIDE (CAS 1309-37-1) | 3 Not classifiable as to carcinogenicity to humans. |
| SILICA, AMORPHOUS, FUMED (CAS 7631-86-9) | 3 Not classifiable as to carcinogenicity to humans. |
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | 1 Carcinogenic to humans. |
| Titanium Dioxide (CAS 13463-67-7) | 2B Possibly carcinogenic to humans. |

US. National Toxicology Program (NTP) Report on Carcinogens

| | |
|--|--|
| SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) | Known To Be Human Carcinogen. |
| | Reasonably Anticipated to be a Human Carcinogen. |

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

| | |
|---|---------------------------|
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |

12. Ecological information

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|--------------------------------------|--|
| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| Persistence and degradability | No data is available on the degradability of any ingredients in the mixture. |
| Bioaccumulative potential | |
| Mobility in soil | No data 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

| | |
|--|---|
| Disposal instructions | This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. |
| Hazardous waste code | Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority. |
| Waste from residues / unused products | Not available. |
| Contaminated packaging | Not available. |

14. Transport information

| | |
|---|-----------------------------------|
| TDG | 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 applicable. |

15. Regulatory information

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|---|--|
| Canadian regulations | This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR. |
| Controlled Drugs and Substances Act | Not regulated. |
| Export Control List (CEPA 1999, Schedule 3) | Not listed. |
| Greenhouse Gases | Not listed. |
| Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011) | ALUMINUM, ELEMENTAL (CAS 7429-90-5) |
| Precursor Control Regulations | Not regulated. |
| International regulations | |
| Stockholm Convention | Not applicable. |
| Rotterdam Convention | Not applicable. |
| Kyoto protocol | Not applicable. |

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|-------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply 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

Issue date 09-04-2020

Version # 01

Disclaimer This information is based on our present knowledge on creation date. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.