1. Identification

Product identifier: OREAS 70B

Other means of identification:

Product code: Q0203078

Recommended use: Used as a check standard for soil and geochem calibrations.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:

Company name: Evident Canada Incorporated
Address: 3415 Rue Pierre-Ardouin, Québec, QC G1P 0B3, Canada
Telephone number: +1 418-872-1155

Emergency telephone number: CHEMTREC


2. Hazard identification

Not classified.

Physical hazards

Health hazards:

- Sensitization, skin Category 1
- Germ cell mutagenicity Category 2
- Carcinogenicity Category 1A
- Specific target organ toxicity following repeated exposure Category 1

Environmental hazards:

- Hazardous to the aquatic environment, acute hazard Category 3
- Hazardous to the aquatic environment, long-term hazard Category 3

Label elements

Signal word: Danger

Hazard statement: May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statement:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards: None known.

Supplemental information: None.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High grade massive nickel sulfide ore and barren ultramafic material</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

Constituents

<table>
<thead>
<tr>
<th>Constituents</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>-</td>
</tr>
<tr>
<td>Nickel sulphide</td>
<td>16812-54-7</td>
<td>-</td>
</tr>
</tbody>
</table>

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

The hazard evaluation is based on the content of nickel sulphide.

4. First-aid measures

Inhalation

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Skin contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Eye contact

Rinse mouth. Get medical attention if symptoms occur.

Ingestion

Dusts may irritate the respiratory tract, skin and eyes. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Most important symptoms/effects, acute and delayed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Indication of immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

None known.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

The product is non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Minimise dust generation and accumulation. Collect dust using a vacuum cleaner equipped with HEPA filter. Prevent product from entering drains. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage
Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection
Occupational exposure limits

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Constituents</th>
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</thead>
<tbody>
<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable particles.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Constituents</th>
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<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
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<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Constituents</th>
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<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>TWA</td>
<td>0.2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Constituents</th>
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<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>
Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel sulphide (CAS 16812-54-7)</td>
<td>15 minute</td>
<td>0.6 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>0.2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Quartz (CAS 14808-60-7)</td>
<td>8 hour</td>
<td>0.05 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

Appropriate engineering controls
Good general ventilation 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. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection
Use tight fitting goggles if dust is generated.

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
Wear respirator with dust filter.

General hygiene considerations
Observe any medical surveillance requirements. 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.

Colour
Not available.

Odour
Not available.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
Not applicable.

Evaporation rate
Not applicable.

Flammability (solid, gas)
This material will not burn.

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.

Vapour pressure
Not applicable.

Vapour density
Not applicable.

Relative density
Not available.

Solubility(ies)

Solubility (water)
Insoluble in water.
Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not applicable.
Decomposition temperature Not available.
Viscosity Not available.

Other information
Explosive properties Not explosive.
Oxidising properties Not oxidising.

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.
Incompatible materials Powerful oxidizers. Chlorine.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.
Skin contact Dust or powder may irritate the skin. May cause an allergic skin reaction.
Eye contact Dust may irritate the eyes.
Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Dusts may irritate the respiratory tract, skin and eyes. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.
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 sensitisation

Respiratory sensitisation Not a respiratory sensitisrer.
Skin sensitisation May cause an allergic skin reaction.
Germ cell mutagenicity Suspected of causing genetic defects.
Carcinogenicity May cause cancer.

ACGIH Carcinogens
Nickel sulphide (CAS 16812-54-7) A1 Confirmed human carcinogen.
Quartz (CAS 14808-60-7) A2 Suspected human carcinogen.

Canada - Alberta OELs: Carcinogen category
Nickel sulphide (CAS 16812-54-7) Confirmed human carcinogen.
Quartz (CAS 14808-60-7) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity
Nickel sulphide (CAS 16812-54-7) Confirmed human carcinogen.
Quartz (CAS 14808-60-7) Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category
Nickel sulphide (CAS 16812-54-7) Detected carcinogenic effect in humans.
Quartz (CAS 14808-60-7) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Nickel sulphide (CAS 16812-54-7) 1 Carcinogenic to humans.
Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.
US. National Toxicology Program (NTP) Report on Carcinogens

Nickel sulphide (CAS 16812-54-7)  Known To Be Human Carcinogen.
Quartz (CAS 14808-60-7)  Known To Be 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
Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Causes damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity
Harmful to aquatic life with long lasting effects.

Persistence and degradability
No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential
No data available.

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
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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. Dispose in accordance with all applicable regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

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
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

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.

Nickel sulphide (CAS 16812-54-7)
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.

16. Other information

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Issue date</td>
<td>12-March-2019</td>
</tr>
<tr>
<td>Revision date</td>
<td>22-November-2022</td>
</tr>
<tr>
<td>Version No.</td>
<td>02</td>
</tr>
</tbody>
</table>

Disclaimer
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