

**SECTION 1 – Identification of the substance or mixture and of company/undertaking****Product Name:** Natural sand**Other means of identification:** Sand, Aggregate,  
Manufactured sand**Recommended Use:** Abrasive for blasting, filtration  
media and other aggregate uses**Restriction on use:** Not available**Supplier/ Contact information:**

Bellemare Abrasives and Minerals

8750 Boul. Industriel

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Canada G9A 5E1

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Emergency phone number: 819-609-9900

**SECTION 2 – Hazards identification****Health hazards:**

Carcinogenicity - Category 1A

Specific target organ toxicity, repeated exposure - Category 2

Skin corrosion/irritation - Category 2

Eyes damage/irritation - Category 2A

**Signal word:****Danger****Hazard statement:** May Cause Cancer (Inhalation). Causes damage to organs (lungs, respiratory system) through prolonged or repeated exposure (inhalation). Causes skin and eyes irritation.**Precautionary statement:****Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, and face protection. Wash any exposed body parts.

**Response**

If exposed or concerned get medical advice/attention.

**Disposal**

Dispose of contents/container in accordance with all local, regional, national, and international regulations.

**Supplemental information:**

Respirable Crystalline Silica (RCS) may cause cancer. Natural sand is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). Natural sand may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC, NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.

### SECTION 3 - Composition / information on ingredients

Ingredient Name	CAS Number	%
SiO <sub>2</sub>	7631-86-9	60-100
Al <sub>2</sub> O <sub>3</sub>	1344-28-1	10-30
Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	1-5
MgO	1309-48-4	0,5-1,5
CaO	1305-78-8	1-5
Na <sub>2</sub> O	1313-59-3	1-5
K <sub>2</sub> O	12136-45-7	1-5
TiO <sub>2</sub>	13463-67-7	0,1-1
Quartz (Crystalline Silica)	14808-60-7	37,0

### SECTION 4 - First aid measures

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Eye Contact:** Immediately flush eyes with large amounts of clean water for at least 15 minutes while holding the eyelids open. Remove contact lenses. Occasionally lift the eyelids to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from eyes. Get medical attention if irritation persists or later develops.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Ingestion:** If swallowed, rinse mouth and drink plenty of water. Do not induce vomiting. If symptoms occur, consult medical staff immediately.

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

Carcinogenic effects: Classified 1 (Proven for human) by IARC. Classified A2 (Suspected for human) by ACGIH. The substance may be toxic to lungs, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

### SECTION 5 - Firefighting measures

**Flammability:** This product is non-flammable and non-explosive.

**Extinguishing Media:** If product is involved in fire, use any extinguishing media appropriate to surrounding.

**Fire-Fighting Equipment/Instructions:** Wear self-contained breathing apparatus with a full-face mask. Wear gloves and appropriate protective clothing. Keep container tightly closed.

**Specific hazards arising from the chemical:** None

### SECTION 6 - Accidental release measures

**Personal Precautions, protective equipment and emergency procedures:** Persons involved in cleanup processes should first observe precautions (as appropriate) identified in Section 8 of this SDS. Spilled material, where dust can be generated, may overexposed cleanup personnel to respirable crystalline silica-containing dust.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Methods and materials for containment and cleaning up:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Do not dry sweep spilled material.

## SECTION 7 - Handling and storage

**Handling Precautions:** Avoid inhalation of dust and contact with eyes and skin. Use only with adequate ventilation and dust collection. Keep airborne dust concentrations below permissible exposure limit. Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. Do not permit dust to collect on walls, floors, sills, ledges, machinery or equipment. Wash thoroughly after handling. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

**Storage Requirements:** Keep container tightly closed and away from incompatible material such as oxidizing agents, alkalis. Keep material dry in storage. Avoid creating dust. Avoid breakage of bagged material or spills of bulk material.

## SECTION 8 - Exposure controls / personal protection

**Exposure Guidelines:** Exposure TWA: 0.05 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Respirable [Quartz or Crystalline Silica] TWA: 0.05 (mg/m<sup>3</sup>) from NIOSH Respirable. [Quartz or Crystalline Silica] Consult local authorities for acceptable exposure limits. Respirable dust and quartz levels should be monitored regularly.

**Engineering Controls:** Activities that generate dust require the use of general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits. Eyewash station should be within direct access.

**Protective Clothing/Equipment:** Safety glasses with side shields should be worn as minimum protection. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated. For respirable quartz levels that exceed or are likely to exceed exposure limit, a NIOSH approved dust respirator or filter respirator must be worn. If respirable quartz levels exceed or are likely to exceed 8hr-TWA of 5 mg/m<sup>3</sup>, a NIOSH approved positive pressure, full face respirator or equivalent is required. Respirator use must comply with applicable MSHA or OSHA standards, which include provisions for a user training program, respirator repair and cleaning, respirator fit testing, and other requirements. Use gloves to provide hand protection from abrasion. For respirable quartz in dusty conditions, use long sleeve shirts and long pants. Wash dust-exposed skin with soap and water before eating, drinking, smoking and using toilet facilities. Wash or vacuum work clothes after each use.

**Contamination:** Take all the necessary precautions stated herein as well as those directed by the coatings and substrate suppliers. Any contamination that cannot be traced must be sampled for its content prior to work.

## SECTION 9 - Physical and chemical properties

**Appearance:**

Light brown to beige, semi-angular particles

**Odor:** Odorless

**PH** Not applicable

**Flammability:** Non-combustible

**Vapor Pressure:** Not applicable

**Vapor Density (Air=1):** Not available

**Boiling Point:** 2230°C

**Melting Point:** 1710°C

**Flash Point:** Non-combustible

**Specific Gravity (H<sub>2</sub>O=1):** 1,8 to 2,5+ (depending on mineral composition)

**Evaporation Rate (butyl acetate=1):** Not applicable

**Solubility in Water:** Insoluble

**Autoignition temperature:** Not applicable

## SECTION 10 - Stability and reactivity

**Stability:** Stable when used, stored and transported under normal conditions.

**Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** None known.

**Incompatible materials:** Incompatible with oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride. When exposed to high temperature quartz can change crystalline structure to form tridymite (above 870°C) or cristobalite (above 1470°C). Soluble in hydrofluoric acid and produces a corrosive gas - silicon tetrafluoride. Quartz is attacked by strong alkalis and hydrofluoric acid.

**Hazardous Decomposition Products:** Unknown and not suspected.

## SECTION 11 - Toxicological information

**Inhalation:** Dusts may irritate the nose, throat, mucous membranes and respiratory tract. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposures limits.

**Eye Contact:** Dust particles can scratch the eye causing tearing, redness, a stinging or burning feeling, or swelling of the eyes with blurred vision. Conjunctivitis may occur.

**Skin Contact:** Direct contact may cause irritation by mechanical abrasion. Some components of the material are also known to cause mild corrosive effects to skin and mucous membranes.

**Ingestion:** Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation including nausea, vomiting, diarrhea, and blockage.

**Medical Conditions Aggravated by Exposure:** Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury. Material is irritating to mucous membranes and upper respiratory tract.

**Delayed and immediate effects and also chronic effects from short and long-term exposure:** Acute pneumoconiosis from overwhelming exposure to silica dust has occurred. Coughing and irritation of throat are early symptoms. Inhalation of quartz is classified as a human carcinogen. Risk of cancer depends upon duration and level of exposure. May also affect liver. Chronic exposure can also cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function. May also affect blood. May contain more than 1% quartz and may cause cancer (tumorigenic). Quartz has been identified by IARC as a class 1 carcinogen.

**Carcinogenicity:** Classified 1 (Proven for human.) by IARC. Classified A2 (Suspected for human.) by ACGIH. May cause damage to the following organs: lungs, upper respiratory tract.

**Toxicological Data on Ingredients:** Sand LD50: Not available. LC50: Not available. Quartz: LCL (Human) - Route: Inhalation; Dose: 300 ug/m3/10Y.

Take special precaution to note the potential hazards of the substrate, coatings or contamination that are removed by the use of our product. All material Certifications and chemical analyses should be obtained before commencement of work.

## SECTION 12 - Ecological information

**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:** Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.

**Bio accumulative potential:** The product itself and its products of degradation are not toxic.

**Mobility in soil:** Not determined

**Other adverse effects:** Not determined

## SECTION 13 - Disposal considerations

Waste Disposal: Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. If approved, may be transferred to a land disposal site. Please refer to section 8 for the safety of persons conducting disposal.

## SECTION 14 - Transport information

**UN Number:** Not regulated

**Transport Hazard Class:** Not applicable

**Packing Group:** Not applicable

**Marine Pollutant:** Not applicable

**Special Precautions:** Not applicable

Shipping Containers: Hopper cars, hopper trucks, bags and semi-bulk bags. Natural sand is not regulated as a hazardous material by DOT.

## SECTION 15 - Regulatory information

You must comply with all OSHA, local, city, state, province, country and jurisdiction regulations, ordinances and standards, related to your particular work area and environment. Keep unprotected individuals out of the work area. Failure to avoid the above danger will result in death or serious injury.

**OSHA:** Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**WHMIS:** D2A

**TSCA:** TSCA 8(b) inventory: Quartz

**DCSL (EEC):** R45- May cause cancer. S2- Keep out of the reach of children. S53- Avoid exposure - obtain special instructions before use.

**California Proposition 65:** This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Quartz California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Quartz

**HMIS:** 1,0,0,E

## SECTION 16 - Other information

**Issue date:** 01/01/2016

**Last Updated:** 15/09/2020

**The following sections contain revisions:** All sections

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