

SAFETY DATA SHEET

2433 No.2 Sideroad, PO Box 1070, Burlington, Ontario, L7R 4L8
 Phone: 905-335-5250
 1-800-263-6320

*This SDS covers many types of sandstone. Composition of hazardous constituents will vary between types of sandstone.

SECTION I: MATERIAL IDENTIFICATION AND USE

Material Name / Identifier:	Sandstone
Manufacturer's Name:	NELSON AGGREGATE CO P.O BOX 1070 BURLINGTON ON L7R 4L8
Supplier's Name:	
Chemical Name:	Sandstone
Chemical Family:	Carbonate Rock
Chemical Formula:	Complex mixture (naturally
variable) Trade Name and Synonyms:	Aggregate, Dolomite, Crushed
stone.	
Molecular Weight:	Not Applicable
Material use:	Construction, ready-mix concrete, concrete products, asphalt, agriculture, metallurgical processes, manufacture of cement, golf course sand

SECTION 2: HAZARDS IDENTIFICATION
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LABEL ELEMENTS: DANGER



Hazard statement: May cause respiratory irritation.
 May cause cancer (inhalation) Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure.

Precautionary statement: Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breath dust.
 Wash exposed body parts thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use outdoors or in a well-ventilated area.
 Wear protective gloves, protective clothing and eye protection.



Precautionary statement: If inhaled, remove person to fresh air and keep comfortable.
If exposure is concerning seek medical attention if feeling unwell.
Store in a well-ventilated area.
Disposal in accordance with local, municipal, regional, provincial regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

*Hazardous Ingredient	Quartz (Crystalline Silica)
Approximate Concentration %	Naturally variable composition (>70%)
CAS Number.	14808-60-7
LD50 (Specify Species and Route)	Not Applicable
LC50 (Specify Species and Route)	Not Applicable
Hazardous Ingredient	Mica
Approximate Concentration %	>5%
CAS Number	12001-26-2

SECTION 4: FIRST AID MEASURES

Dust in Eyes: Flush out eyes with running water for 15 minutes. Contact a physician if irritation persists.

Dust on Skin: Wash with soap and water. Contact a physician if irritation is aggravated.

Dust Inhalation: Remove to fresh air. Dust in throat and nasal passages should clear spontaneously.
Contact a physician if irritation persists.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water.
Seek medical attention or contact poison control center immediately.

Effects of Chronic Exposure:

1. Chronic exposure to respirable dust at levels exceeding exposure limits has caused pneumoconiosis.
2. Chronic exposure to respirable dust containing quartz at levels exceeding exposure limits has caused silicosis, a serious and progressive pneumoconiosis which can be disabling, and lead to death. Symptoms may appear at any time; even years after exposure has ceased. Symptoms of silicosis may include shortness of breath, difficulty in breathing, coughing, diminished work capacity, diminished chest expansion, reduction of lung volume and right heart enlargement and/or failure. The only reliable method of detecting silicosis is through a chest X-ray. Silicosis may aggravate other chronic pulmonary conditions and may increase the risk of pulmonary tuberculosis infection. Smoking aggravates the effects of silica exposure.
3. Chronic (repeated and prolonged) exposure to respirable dust at levels exceeding exposure control limits has caused pneumoconiosis. Chronic (repeated and prolonged) exposure to respirable dusts containing silica (quartz) at levels exceeding exposure control limits has caused silicosis, a serious and progressive pneumoconiosis, which can be disabling and lead to death. Symptoms may appear at any time, even years after exposure has ceased. Symptoms of silicosis may include: shortness of breath, difficulty breathing. Coughing, diminished work capacity, diminished chest expansion, reduction of lung volume and right heart enlargement and/or failure. The only reliable method of detecting



silicosis is through a chest x-ray. Silicosis may aggravate other chronic pulmonary conditions and may increase the risk of pulmonary tuberculosis infection. Smoking aggravates the effects of silica (quartz) exposure.

Route of Entry: Inhalation, eye contact, skin contact

Effects of Acute Exposure: Eye Contact: Mechanical irritation causing redness

Ingestion: Unlikely to occur

Inhalation: Unlikely to occur but may cause mechanical irritation and coughing

Skin Absorption: will not absorb through skin

Skin Contact: Mechanical irritation causing redness

Use of sand and gravel for construction purposes is believed not to have caused acute toxic effects.

Effects of Chronic Exposure:

1. Chronic (repeated and prolonged) exposure to respirable dust at levels exceeding exposure control limits has caused pneumoconiosis.
2. Chronic (repeated and prolonged) exposure to respirable dusts containing silica (quartz) at levels exceeding exposure control limits has caused silicosis, a serious and progressive pneumoconiosis, which can be disabling and lead to death. Symptoms may appear at any time, even years after exposure has ceased. Symptoms of silicosis may include: shortness of breath, difficulty breathing. Coughing, diminished work capacity, diminished chest expansion, reduction of lung volume and right heart enlargement and/or failure. The only reliable method of detecting silicosis is through a chest X-ray.

Silicosis may aggravate other chronic pulmonary conditions and may increase the risk of pulmonary tuberculosis infection. Smoking aggravates the effects of silica (quartz) exposure.

For additional information on the above exposure limit, consult Ontario Regulations 490/09 and 491/09.

Irritancy of Material: Mechanical irritation to respiratory system, eyes and skin

Sensitization of material: None known

Synergistic Material: None known

Carcinogenicity, Reproductive Effects, Teratogenicity, Mutagenicity: As of the date of preparation of this SDS (April 2020).

1. Sand and Gravel [Limestone] are [is] not included on ACGIH, IARC, NTP or OSHA lists of potential carcinogens;
2. Crystalline silica in the form of quartz, and as a component of this material is listed as carcinogenic by IARC, NTP, and ACGIH. The International Agency for Research on Cancer (IARC) has concluded that crystalline silica in the form of quartz or cristobalite from occupational sources should be classified as carcinogenic to humans (Group 1), upgraded from its previous classification as probably carcinogenic to humans (Group 2A). The US National Toxicology Program (NTP) identifies crystalline silica (respirable size) as a substance which may reasonably be anticipated to be a carcinogen, Group 2. The American Conference of Governmental Industrial Hygienists (ACGIH) has assigned a carcinogenicity designation, A2 Suspected Human Carcinogen, for crystalline silica.



SECTION 5: FIRE FIGHTING MEASURE

Exercise caution when fighting any chemical fire.
Do not enter fire area without personal protective equipment, including respiratory.

Flammability:	Will Not Burn
Means of Extinction:	Not applicable. Can be used to smother fire.
Special Procedures	N/A
Flashpoint (° C) and Method	None
Upper Explosion Limit (% by Volume)	N/A
Lower Explosion Limit (% by Volume)	N/A
Auto-ignition Temperature (° C)	None
Hazardous Combustion Products	N/A

EXPLOSION DATA:

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment:

Gloves (Specify): Work gloves recommended

Eye (Specify): Safety glasses with a side shield should be worn as minimum protection. Dust goggles should be worn when excessively (visible) dusty conditions are present or anticipated.

Respiratory (Specify): Refer to the Ontario Designated Substance Respirator Codes (2018): < 10X TWAEV half mask particulate respirator with N, R- or P- series filter and 95, 99 or 100% efficiency; -<25X TWAEV powered air purifying respirator with a hood or helmet and any type of particulate filter, or supplied air equipped with a hood or helmet and operated in a continuous flow mode. Respiratory protective equipment should be used in accordance with CSA Standard Z94.4-18.

Other (Specify): Work clothing recommended to reduce skin exposure. Wash work clothing after every use.

Engineering Controls (Ventilation, Enclosed Process – Specify): Where feasible, the dust levels should be reduced through wet suppression, dust collection, ventilation, process enclosure and enclosed pressurized employee work stations.

Leak and Spill Procedure: Spilled materials, where dust can be generated, may expose clean-up personnel to respirable dust. Wetting of spilled material and/or use of protective respiratory equipment may be necessary.

Waste Disposal: Re-use clean materials; dispose of waste materials only in accordance with applicable federal, provincial and local laws and regulations.



Handling Procedures and Equipment: Respirable dust may be generated during processing, handling and storage – avoid inhalation. Refer to “Personal Protective Equipment – Respiratory”.

Storage Requirements: None

Special Shipping Information: None

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Cutting, grinding, crushing crystalline silica materials may release respirable crystalline silica a known carcinogen. Use appropriate measures of dust control or water suppression and PPE.

Wash hands and exposed areas with soap and water before eating, drinking or smoking.

Avoid contact with eyes, skin.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breath dust.

Hygiene measures to be in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage: Comply with applicable regulations. Keep containers closed when not in use. Store in a dry, cool place. Store away from incompatible materials.

Incompatible materials: Dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, manganese trifluoride, and oxygen difluoride.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

There are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including, ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments.

INGREDIENT	ACGIH TLV	OEL TWA
Crystalline silica (Quartz) 14808-60-7	0.025 mg/m3 (respirable)	0.1 mg/m3 designated substances regulation respirable
Mica 12001-26-2	3 mg/m3 (respirable particulate matter)	3 mg/m3 (respirable)



Exposure Controls:

Engineering Controls (Ventilation, Enclosed Process – Specify): Where feasible, the dust levels should be reduced through wet suppression, dust collection, ventilation, process enclosure and enclosed pressurized employee work stations. If airborne particles are generated monitor dust concentrations in air and provide local exhaust ventilation when any exposure guideline is exceeded. Ensure regular cleaning/housekeeping of equipment, work areas, and clothing.

If engineering controls and work practices are not effective in controlling exposure to this material, wear suitable personal protective equipment including respiratory protection.

Personal Protection Measures:

Eye/face: Wear approved safety glasses. Wear a face shield or full-face respirator when needed to prevent exposure to irritating dusts.

Hand protection: Wear gloves

Skin protection: Wear thermal gloves and clothing as needed to prevent burns to skin.

Respiratory protection: When dust in air exceeds the occupational exposure, guidelines wear an approved respiratory protection should be worn.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Odour and Appearance:	No odour; variety of colors.
Odour Threshold (P.P.M.)	Not Applicable
Specific Gravity	2.6 – 2.8
Vapour Pressure (MM)	Not Applicable
Vapour Density (Air = 1)	Not Applicable
Evaporation Rate	0
Solubility in Water (20° C)	Negligible
Boiling Point (° C)	Not Applicable
Freezing Point (°C)	Not Applicable
pH:	Not Applicable
Percentage Volatile (By Volume)	0
Coefficient of Water/Oil Distribution	Not Applicable

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Yes
Incompatibility to other substances	Dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, manganese trifluoride, and oxygen difluoride.
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous Decomposition Products:	None expected under normal use.
Conditions to avoid:	Incompatible materials.



SECTION 11: TOXICOLOGICAL INFORMATION

Route of Entry: Inhalation, eye contact, skin contact

Effects of Acute Exposure: Eye Contact: Mechanical irritation causing redness

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Sensitization of material: None known

Synergistic Material: None known

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Not classified.

Persistence and degradability: Not established.

Bio accumulative potential: Not established.

Mobility in soil: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods:

Dispose of waste material in accordance with federal, state, provincial and local regulations.

Avoid generating dust during disposal. Avoid contact with eyes, and skin. See section 8 for personal protection measures.

Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

N/A

SECTION 15: REGULATORY INFORMATION

Canada: Listed on the DSL.

SECTION 16: OTHER INFORMATION

Revision date: April 2020

The Company believes that the information contained herein is factual. The data and information presented are without warranty, guarantee or liability on our part, and are presented to the customer for his own consideration, investigation and verification
