



# Sand and Gravel

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)  
Issue date: 2017-06-14 Revision date: 2023-02-13 Supersedes: 2019-02-12 Version: 3.0

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture - Aggregates, crushed gravel, crushed rock and stone, round stone, natural sand, screened sand, bank sand and gravel, concrete sand, asphalt sand

Product name : Sand and Gravel

Note : This SDS covers many types of sand and gravel. Individual composition of hazardous constituents will vary between sand and gravel types.

#### 1.2. Recommended use and restrictions on use

Recommended use : Used in road building, excavation work and other construction applications. Used in the manufacture of bricks, mortar, cement and paving materials.

Restrictions on use : Do not use this product for abrasive blasting.

#### 1.3. Supplier

##### Manufacturer

J-AAR Limited  
3003 Page St.  
London, ON N5V 4J1  
Canada  
T 519-652-2104

#### 1.4. Emergency telephone number

Emergency number : 519-652-2104

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS CA)

Carc. 1A	H350	May cause cancer.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 1	H372	Causes damage to organs (lungs) through prolonged or repeated exposure.

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-CA labelling

Hazard pictograms (GHS-CA) :



Signal word (GHS CA) : Danger

Hazard statements (GHS-CA) : H335 - May cause respiratory irritation.  
H350 - May cause cancer.  
H372 - Causes damage to organs (lungs) through prolonged or repeated exposure.

Precautionary statements (GHS-CA) : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product



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- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 - IF exposed or concerned: Get medical advice/attention.
- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 - Call a POISON CENTER or doctor if you feel unwell.
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up.
- P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS CA)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Quartz	Crystalline silica, quartz	CAS-No.: 14808-60-7	60 - 100

Comments : The concentrations listed represent actual ranges that result from batch variability.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Exposure may cause coughing or wheezing.
- Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- Chronic symptoms : Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. May cause cancer.



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### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media : Foam, powder, carbon dioxide (CO<sub>2</sub>), water spray.

### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use water jet.

### 5.3. Specific hazards arising from the hazardous product

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Non flammable. Non explosive.

### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Do not breathe dust.

### 6.2. Methods and materials for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Use wet methods, if appropriate, to reduce the generation of dust. Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust. Minimise generation of dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Avoid contact with skin and eyes. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : To prevent burial or suffocation, do not enter confined spaces or storage areas, like bins, silos, trucks that contain sand and gravel. Sand and gravel can release, fall or flow suddenly causing engulfment. Keep out of the reach of children. Keep container tightly closed. Store locked up. Store in a well-ventilated place.



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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Sand and Gravel	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m <sup>3</sup> (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2020
<b>Quartz (14808-60-7)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
ACGIH chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2022

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
Wear suitable gloves
<b>Eye protection:</b>
Safety glasses or goggles are recommended when using product.
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Other information:

Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.



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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular solid.
Colour	: White Light grey light brown
Odour	: No data available
Odour threshold	: No data available
pH	: 7
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 1000 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: 2.7
Solubility	: Insoluble.
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available

#### Quartz (14808-60-7)

Boiling point	2230 °C
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#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Heat. Incompatible materials.
Incompatible materials	: Sand in mix dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon.
Hardening time:	: No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.
Skin corrosion/irritation	: Not classified. pH: 7
Serious eye damage/irritation	: Not classified. pH: 7



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Respiratory or skin sensitization : Not classified.  
Germ cell mutagenicity : Not classified.  
Carcinogenicity : May cause cancer.

### Quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity : Not classified.  
STOT-single exposure : May cause respiratory irritation.  
STOT-repeated exposure : Causes damage to organs (lungs) through prolonged or repeated exposure.

### Quartz (14808-60-7)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard : Not classified.

### Quartz (14808-60-7)

Animal studies and expert judgment for classification	False
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Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Exposure may cause coughing or wheezing.  
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.  
Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.  
Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
Chronic symptoms : Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. May cause cancer.  
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.  
Hazardous to the aquatic environment, short-term (acute) : Not classified.  
Hazardous to the aquatic environment, long-term (chronic) : Not classified.

### 12.2. Persistence and degradability

#### Sand and Gravel

Persistence and degradability	Not established.
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### 12.3. Bioaccumulative potential

#### Sand and Gravel

Bioaccumulative potential	Not established.
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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Ozone : Not classified.  
Other information : No other effects known.



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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### SECTION 14: Transport information

In accordance with TDG

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (TDG) : Not applicable

#### 14.3. Transport hazard class(es)

##### TDG

Transport hazard class(es) (TDG) : Not applicable

#### 14.4. Packing group

Packing group (TDG) : Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

##### TDG

No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

#### 15.2. International regulations

No additional information available

### SECTION 16: Other information

Issue date : 06-14-2017  
Revision date : 02-13-2023  
Supersedes : 02-12-2019



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### Indication of changes:

SDS update.

Other information

: None.

Prepared by

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Safety Data Sheet (SDS), Canada - Nexreg 2022

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