



# CBM

55 Industrial Street  
Toronto, Ontario M4G 3W9  
416-423-1300

## MATERIAL SAFETY DATA SHEET SAND & GRAVEL

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### SECTION I - MATERIAL IDENTIFICATION AND USE

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**Material Name/Identifier:** Natural Sand & Gravel  
**Chemical Name:** Sand and Gravel  
**Chemical Family:** Not applicable  
**Chemical Formula:** Complex mixture (naturally variable)  
**Trade Name and Synonyms:** Aggregate, sand, crushed gravel  
**Molecular Weight:** Not available  
**Material Use:** Construction, ready mix concrete, concrete products, asphalt

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### SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

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**Sand and Gravel:** A complex mixture (naturally variable composition of primarily metamorphic and sedimentary rock particles\*)

**C.A.S., N.A., or U.N. Number:** Not applicable

**L.D.:** Not available

**L.C.:** Not available

**\*Sand and gravel may contain varying concentrations of:**

- A) Quartz (Crystalline Silica)  
C.A.S., N.A., or U.N. Number: 14808 -60 -7
- B) Mica  
C.A.S., N.A., or U.N. Number: 12001 -26 -2

**Note:** This MSDS is applicable to Sand & Gravel only when the concentration of Quartz or Mica is greater than 0.1 (%) percent.

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### SECTION III - PHYSICAL DATA FOR MATERIAL

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**Physical State:** Solid  
**Odour and Appearance:** No odour; angular or rounded multi-coloured particles of varying sizes.  
**Odour Threshold (P.P.M.):** Not applicable  
**Specific Gravity:** 2.5 - 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



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pH: Not applicable  
Percentage Volatile (By volume): 0  
Coefficient of Water/Oil Distribution: Not applicable

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**SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL**

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Section not applicable

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**SECTION V - REACTIVITY DATA**

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Chemical Stability: Yes  
Incompatibility to Other Substances: No  
Hazardous Decomposition Products: None Known  
Reactivity: No

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**SECTION VI - TOXICOLOGICAL PROPERTIES OF MATERIAL**

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Route of Entry: Inhalation  
Effects of Acute to Material: Exposure to dust may irritate respiratory system. Use of natural Sand and Gravel for construction purposes is believed not to have caused acute toxic effects.

**Effects of Chronic Exposure to Material:**

1. Chronic exposure to respirable dust at levels exceeding exposure limits has caused pneumoconiosis.
2. Chronic exposure to respirable Sand and Gravel dust containing quartz and mica 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 and mica pneumoconiosis 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. The signs and symptoms of mica pneumoconiosis resemble that of silicosis, however, the X-ray patterns of the lung field marking are different and tuberculosis is not a complication.

**L.D. of Material (Specify Species and Route):** Not available

**L.C. of Material (Specify Species and Route):** Not available

**Exposure Limites (Ontario):** Respirable Silica dust 0.2 mg/metre<sup>3</sup> (TWAEV<sup>1</sup>)

*For additional informaiton on the above exposure limits, consult Ontario Regulations 654/86 and 769/83, amended 23/87.*

**Irritancy of Material:** Respiratory system, eyes, skin.

**Sensitization of Material:** Not available

**Synergisitic Material:** None known

**Carcinogenicity, Reproductivve Effects, Teratogenicity, Mutagenicity as date of preparation of this MSDS:**

1. Sand and Gravel is not included on the ACGIH, NTP or OSHA lits of potential carcinogens.

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<sup>1</sup> Time Weighted Average Exposure Value



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2. Silica, in the form of crystalline Quartz, and as a component of this material is listed as a potential carcinogen by IARC. IARC (International Agency for Research on Cancer) has determined that there is limited evidence of carcinogenicity to humans. Limited evidence of carcinogenicity indicates that casual interpretation is credible, but alternate explanations such as chance, bias or controlling facts could not adequately be excluded. There is no evidence that Sand and Gravel is a teratogen, a mutagen or has a reproductive effect.

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## SECTION VIII - PREVENTATIVE MEASURES

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- Personal Protective Equipment:** Respiratory protection should be used whenever dust is generated. Refer to the Ontario Regulation 769/83 as amended for respiratory equipment specified for various respirable silica dust levels.
- Engineering Controls (Ventilation, Enclosed Process):** Where feasible, dust levels should be reduced through wet suppression, dust collection, ventilation, process enclosure and enclosed pressurized employee work stations.
- Leak and Soil Procedure:** Spilled materials, where dust can be generated, may expose clean up personnel to respirable dust. Wetting of spilled materials 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 Equipments:** Respirable dust may be generated during processing, handling and storage-avoid inhalation. Refer to "Personal Protective Equipment-Respiratory".
- Storage Requirements:** Not applicable
- Special Shipping Information:** Not applicable

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## SECTION VIII - FIRST AID MEASURES

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- 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 passage should clear spontaneously. Contact a physician if irritation persists.

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## SECTION IX - PREPARATION DATE OF MSDS

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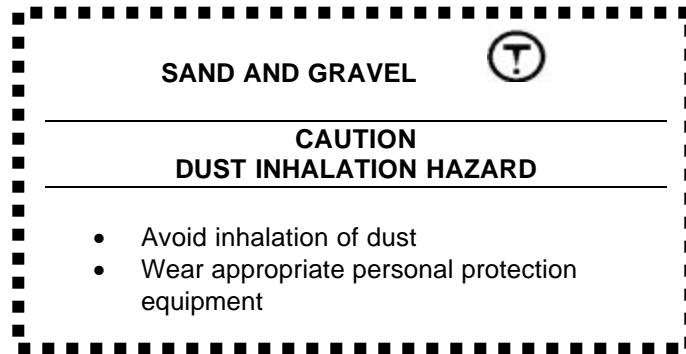
**Prepared by:**  
**Manufacturer's Name:** CBM Aggregates  
**Address:** 55 Industrial Street  
**Telephone:** 416-426-1300  
**Fax:** 416-423-5673  
**Date:** July 2008

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**SECTION X - LABEL INFORMATION**

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Labeling of bulk products is not required, however, label information is as follows:



**Additional Notes or References:** Physical irritation may result from handling limestone. Work gloves and work clothing are recommended.

*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.*