GRAND RAPIDS GRAVEL COMPANY

SAFETY DATA SHEET
for
Sand and Gravel (Aggregates)

Section 1 – Identification

Material:

Sand and gravel

Manufacturer:

Grand Rapids Gravel Company
2700 28th Street, SW
P.O. Box 9160
Grand Rapids, MI 49509

Telephone:

(616) 538-9000

Emergency Telephone:

(616) 538-9000

Recommended Use:

Aggregates are used in the manufacture of concrete, construction of base strata, decorative mulch and other construction and fill uses.

Other Identifications:

Coarse aggregate, fine aggregate, dense graded aggregate, stone, gravel, #4 sand, concrete sand, #8 sand, masonry sand, fill sand, drainage base, etc.

Section 2 – Hazard Identification

WARNING

TOXIC – Harmful by inhalation (May contain crystalline silica)
CARCINOGEN – May cause Cancer (Inhalation)
May cause damage to organs (lungs / respiratory system) through prolonged or repeated exposure (Inhalation)

USE PROPER engineering controls, work practices and protective equipment (PPE) to prevent exposure to and fine particulate from these products.

HAZZARD NOTES:

Aggregate products are processed natural stones and sand and may vary in color and texture. The products are not combustible or explosive. Dust may cause mechanical irritation to eyes, nose, throat and lungs. Direct contact may result in corneal injury. Individuals with lung disease (bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure

Section 3 – Composition / Information on Ingredients

HAZARDOUS COMPONENTS (COMMON NAME / CHEMICAL IDENTITY)	CAS Nos	OSHA PEL	ACGIH TLV	MSHA PEL	%
Crystalline Silica (Quartz) (Concrete aggregates may contain silica)	14808-60-7	10 mg/m³ %SiO_2+2 (Respirable) 30 mg/m³ %SiO_2+2 (Total Dust) 250 million part/ft³ %SiO_2+5	0.05 mg/m³ (Total) respirable Quartz	30 mg/m³ %SiO_2+2 (Total) 10 mg/m³ %SiO_2+2 (Respirable Particulate)	0-98%
Limestone ($CaCo_3$) (Calcium carbonate present in limestone aggregates pieces.)	1317-65-3	15 mg/m³ (Total)	10 mg/m³ (Total)	10 mg/m³	0-65%
Magnesium Carbonate	546-93-0		10 mg/m³		0-30%
Aluminum Silicates (Feldspar)	1302-76-7		2 mg/m³ Aluminum		
Mica	12001-26-2	20 million part/ft³ (Respirable)	3 mg/m³		0-10%
Particulates not otherwise Classified		15 mg/m³ (Total) 5 mg/m³ (Respirable)	10 mg/m³ (Inhalable) 3 mg/m³ (Respirable)	10 mg/m³ (Total)	0-100%
TRACE MATERIALS: Due to the use of substances from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis					

Section 4 – First Aid

Eye Contact – Rinse eyes thoroughly with water for at least 15 minutes to remove all particles. Seek medical attention for abrasions and burns.

Skin Contact – Wash with cool water and a pH neutral soap or mild skin detergent. Seek medical attention for rash, burns, irritation, and dermatitis.

Inhalation – Move to fresh air. Seek medical attention for discomfort or if coughing and other symptoms do not subside.

Ingestion – Do not induce vomiting. If conscious, drink plenty of water. Seek medical attention.

Section 5 – Firefighting Measures

Flash Point – Not Combustible Flammable Limits – Not Flammable LEL – N/A UEL – N/A

General Hazard – Avoid breathing dust.

Extinguishing Media – Noncombustible. Extinguish the surrounding fire.

Unusual Fire and Explosion Hazards – None reported.

Section 6 – Accidental Release Measures

Spills – Personnel cleaning up aggregate spills should take steps to avoid breathing dust. Gloves, safety glasses and suitable clothing should be worn to avoid contact with skin and eyes. Do not wash aggregates down sewage and drainage systems or into bodies of water (lakes, streams, etc.)

Disposal – Aggregate can be returned for recycle or disposed of in a landfill as common solid waste. Follow applicable Federal, State and local regulations. Uncontaminated aggregate is neither a listed nor a characteristic hazardous waste under designations made by USEPA or USDOT.

USDOT Class – Uncontaminated aggregates do not meet any hazardous material class definition found in Title 49 Code of Federal Regulations Part 173.

Precautions – Avoid actions that cause the sand or gravel to become airborne. Avoid inhalation of the dust. Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean up dust. Protective clothing and practices should be used as outlined in Section 8 of this SDS.

Section 7 – Handling and Storage

Handling – Follow protective controls set forth in Section 8 of this SDS when handling this product. Do not breathe dust. Avoid contact with skin and eyes.

Do not store near food or beverages. Supplemental engineering controls are not necessary when working with moist or wet aggregates. They may be necessary if working with dry aggregates or in confined areas. Use good housekeeping practices to avoid accumulation of dust in the work space.

Section 8 – Exposure Controls / Personal Protection

Respiratory Protection – When exposed to dust with exposure above the recommended limits, (noted in Section 3) wear a suitable NIOSH approved respirator with protection factor appropriate for the level of exposure. For emergency or non-routine, (e.g. confined spaces) additional precautions or equipment may be required. Respirator must comply with applicable MSHA or OSHA standards.

Local Exhaust Ventilation – Provide general or local exhaust ventilation systems as needed to maintain airborne dust concentrations below the OSHA PLSs, MSHA PELs and ACGIH TLVs.

Other – Respirable dust and quartz levels from aggregate spreading operations should be monitored regularly. Dust and Quartz levels in excess of applicable OSHA PELs, MSHA PELs and ACGIH TLVs should be reduced by all feasible engineering controls.

Gloves – When handling aggregate wear gloves to prevent skin contact. Wash thoroughly with water and a pH-neutral soap after handling.

Eye Protection – Safety glasses with side shields or goggles should be worn when aggregate is being dumped or handled. Approved respirators should be worn to protect from the dust.

Other Protective Clothing or Equipment – Wear suitable protective clothing to prevent skin contact with aggregates. Wear NIOSH approved respirators when exposure exceeds applicable limits.

Work / Hygienic Practices – Avoid dust inhalation and direct contact with skin and eyes. Wash contaminated skin before eating, drinking, smoking, lavatory use and before applying cosmetics.

Section 9 – Physical and Chemical Properties

Boiling Point	Not applicable
Specific Gravity (water=1)	2.5 to 2.9
Vapor Pressure	Not applicable
Melting Point	Not applicable
Vapor Density (air =1)	Not Applicable
Evaporation Rate (Butyl Acetate = 1)	Not Applicable
Solubility in Water	Negligible
Appearance and Odor	Aggregate products are odorless solid materials of varying size, color and texture.

Section 10 – Stability and Reactivity

Stability – Product is stable.

Incompatibility – Aggregates are stable under the expected conditions of use. Under unanticipated conditions of use, crystalline silica may react with hydrofluoric acid to produce a corrosive gas. (silicon tetra fluoride)

Hazardous Decomposition or Byproducts – None.

Section 11 – Toxicological Information

Information on Toxicological Effects –

If in contact with the skin it can cause abrasions. Prolonged or frequent contact can cause irritation and dermatitis.

If in contact with the eyes it can cause irritation to the eyelids, cornea (conjunctivitis) and lesions to the eyeball.

Inhalation may cause cancer.

Repeated exposure (Inhalation) may cause damage to organs (lungs / respiratory system)

A single exposure may cause respiratory irritation.

Section 12 – Ecological Information

Eco toxicity – No additional information is available..

Persistence and Degradability – Not applicable.

Bio Accumulative Potential – Not applicable.

Mobility in Soil – Not applicable.

Results of PBT and vPvB Assessment – Not applicable.

Other Adverse Effects – None.

Section 13 – Disposal Considerations

Waste Treatment Methods –

Uncontaminated aggregate – Can be recycled. Inert. Disposal subject to local regulations.

Section 14 – Transportation Information

USDOT Class – Uncontaminated aggregates do not meet any hazardous material class Definition found in Title 49 Code of Federal Regulations Part 173.

Section 15 – Regulatory Information

OSHA / MSHA Hazard Communication – This product is considered by OSHA / MSHA to be a hazardous material and should be included in the employer's hazard communication program.

CERCLA / SUPERFUND – This product is not listed as a CERCLA hazardous substance.

EPCRA SARA Title III – This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Re-authorization Act of 1986 and is considered a hazardous and a delayed health risk.

EACRA SARA Section 313 – This product may contain substances subject to the reporting requirements of Section 313 of Tytle III of the Superfund Amendments and Re-authorization Act of 1986 and 40 CFR Part 372.

RCRA – If discarded, this product would not be a hazardous waste. However, under RCRA, it is the responsibility of the product user to determine, at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA – Crystalline silica are exempt from reporting under the inventory update rule.

CALIFORNIA PROPOSITION 65 – Crystalline silica (airborn particulates of respirable size) is a substance known by the State of California to cause cancer.

WHIMSI / DSL – Products containing crystalline silica and calcium carbonate are classified as D2A, E and are subject to WHMIS requirements.

Section 16 – Other information

DISCLAIMER – Fine and coarse aggregates are mined from the earth and their constituent ingredients vary in composition. This SDS relates to the specific materials designated herein. Further, conditions of use are outside the aggregate producer's control. Information set forth is intended for use by persons having the technical skill and who, at their own discretion, are aware of the risks of the material.

SAFETY DATA SHEET – This safety data sheet was created in September of 2015 by Grand Rapids Gravel Company from a draft version produced by NRMCA.