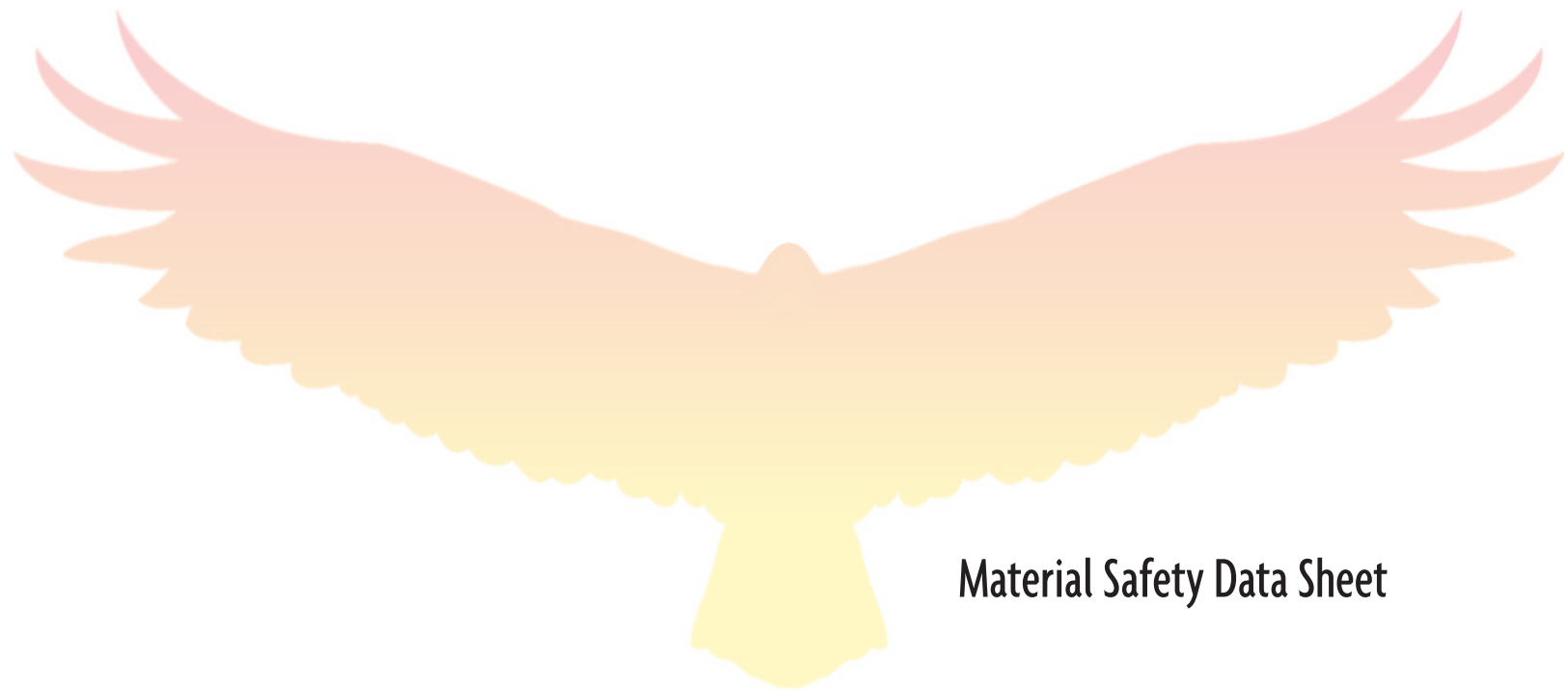




Quality & integrity etched in stone



Material Safety Data Sheet

Gagne & Son Concrete Blocks

MSDS: Concrete Masonry Units / Precast Units

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MATERIAL SAFETY DATA SHEET

SECTION # 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): Gagne & Son Manufactured Products

Product Identifiers: Concrete Masonry Units (CMUs), Fast Brick, Pavers, Keystone Retaining Walls, Dek-Block, Sound Block – Various Shapes, Sizes, Colors (*) & Aggregate Type (Light Weight (#))
Precast Concrete, Septic Tanks, Pump Tanks, Distribution Boxes, Tank Risers, Well Tiles, Tapered Piers, Parking Curbs, Precast Pads - Various Shapes & Sizes

Manufacturer:
Gagne & Son Concrete Blocks
28 Old Route 27 Road
Belgrade, Maine 04917

Information Telephone Number:
207-495-3313 (07:00 to 17:00 EST)
Emergency Telephone Numbers:
207-495-3313 (Standard)
*707-331-7710 (Color Green)
#518-235-0401 (Light Weight)

Product Use: **Concrete Masonry Units** are used in a wide variety of applications in Building Construction & Hardscaping Projects.
Precast Concrete Items are used in a wide variety of applications in General Construction, Waste Handling & Hardscapeing Projects.

Note: This MSDS covers many concrete products. Individual composition of hazardous constituents will vary between types of concrete product.

SECTION # 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components: Silica, Crystalline Quartz (Respirable)
Portland Cement
* Copper Compounds
Alumina (Nuisance Dust)

Specific Chemical Identity: Silicone Dioxide SiO₂ (CAS 14808-60-7)
Portland Cement (CAS 65997-15-1)
* Phthalocyanine C₃₂CL₁₆CUN₈ (CAS 1328-53-6)
Alumina Al₂O₃

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Common Names: Silica, Flint, Sand, Crystalline Free Silica, Quartz, Ground Silica, Silica Flour
Dragon Type III Portland Cement
* Green Pigment / Dye (Copper)
Norlite Expanded Shale – Lightweight Aggregate

OSHA PEL: Exposure to airborne crystalline silica shall not exceed an 8-hour time-weighted average limit as stated in 29 CFR 1910.1000 Table Z-1-A, Air Contaminants, specifically:
Silica, Crystalline Quartz - 0.1 mg/M₃ (Respirable Dust)
**Portland Cements - 5 mg/M₃ (Respirable Dust)
* Green Pigment (As CU) - 1mg/M₃ (Respirable Dust)
Norlite - 5 mg/M₃ (Respirable Dust)

**NOTE: Portland Cements are listed by OSHA in 29 CFR 1010.1000, Table Z-1-A and require material safety data sheets. MSHA and ACGIH list Portland cements as nuisance dusts. Portland cements are not listed by NTP, IARC or OSHA as carcinogens. However, since Portland cement is manufactured from raw material mined from the earth (limestone, marl, sand, shale, clay, etc.) and process heat is provided by burning fossil fuels, trace, but detectable, amounts of naturally occurring, and possible harmful, elements may be found during chemical analysis. Under ASTM standards, Portland cement may contain .75 % insoluble residue. For example. Cement may contain trace amounts of Calcium Oxide (Quick Lime), Magnesium Oxide, Potassium and Sodium Sulfate Compounds, Chromium Compounds, Nickel Compounds, and other Trace Compounds.

ACGIH TLV: Crystalline Quartz
TLV – TWA = 0.1 mg/M₃ (Respirable Dust)
Portland Cement – TLV = 10 mg/M₃ (Respirable Dust)
*Green Pigment – TLV = 1 mg/M₃ (Respirable Dust)
Norlite – TLV = 5mg/M₃ (Respirable Dust)

SECTION # 3 – HAZARD IDENTIFICATION

Emergency Overview: Concrete products vary in size, shape and color, depending on final use. They are not combustible or explosive. Concrete products in their intact state will not release airborne dust, but dust can be produced during cutting, drilling, grinding, chasing and other machining of the product. A single, short-term exposure to concrete dust presents little or no hazard.

Potential Health Effects:

Eye Contact: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of concrete dust

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can cause moderate eye irritation and abrasion. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Skin Contact: Concrete dust may cause dry skin, discomfort, irritation and dermatitis.

Dermatitis: Concrete dust in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by the physical properties of concrete dust such as abrasion.

Inhalation (Acute): Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure.

Inhalation (Chronic): Risk of injury depends on duration and level of exposure.

Silicosis: This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease. See Note to Physicians in Section 4 for further information.

Carcinogenicity: Concrete is not listed as a carcinogen by IARC or NTP; however, concrete contains trace amounts of crystalline silica which is classified by IARC and NTP as known human carcinogens.

Autoimmune Disease: Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys.

Tuberculosis: Silicosis increases the risk of tuberculosis.

Renal Disease: Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica.

Ingestion: Do not ingest concrete. Although ingestion of small quantities of concrete is not known to be harmful, large quantities can cause distress to the digestive tract.

Medical Conditions Aggravated by Exposure: Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure.

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SECTION # 4 – FIRST AID MEASURES

Eye Contact: Immediate flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). contact a physician if irritation persists or later develops.

Skin Contact: Wash with cool water and a pH neutral soap or mild skin detergent. Seek medical attention if irritation, rash, or dermatitis later develops.

Inhalation: Move person to fresh air. Dust in throat and nasal passages should clear spontaneously. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water. Seek immediate medical attention.

Note to physician: The three types of silicosis include:

- **Simple Chronic Silicosis** – which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD).
- **Accelerated Silicosis** – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years). Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis.
- **Acute Silicosis** – results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels.

SECTION # 5 – FIRE AND EXPLOSION DATA

Portland Cement is not combustible.

Flash Point (Method Used): N/A

Flammable Limits: N/A **LEL:** N/A **UEL:** N/A

Extinguishing Media: N/A

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Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: N/A

laundry before reusing.

Respiratory Protection: Under ordinary conditions no respiratory protection is required. To minimize exposure to dust and / or crystalline silica, cutting or grinding concrete products should be conducted with a wet saw / grinder and with sufficient ventilation. When such controls are not feasible, NIOSH / MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR 1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection".

Eye Protection: Wear ANSI approved glasses with side shields or safety goggles when handling concrete products and when involved with activities that generate dust, to prevent contact with eyes. Wearing contact lenses when using concrete products, under dusty conditions, is not recommended.

Foot Protection: Wear ANSI approved hard-toed safety boots when handling concrete products.

SECTION # 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	Evaporation Rate:	N/A
Appearance:	Various colors and shapes	pH (in water):	7
Odor:	None	Boiling Point:	None, Solid
Vapor Pressure:	N/A	Freezing Point:	None, Solid
Vapor Density:	N/A	Viscosity:	None, Solid
Specific Gravity:	2.5	Solubility in Water:	Not Soluble

SECTION # 10 – STABILITY AND REACTIVITY

Stability:	Stable	Incompatibility:	None Known
Hazardous Polymerization:	None	Hazardous Decomposition:	None

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SECTION # 11 – TOXICOLOGICAL INFORMATION

For questions regarding toxicological information refer to information in Section # 2.

SECTION # 12 – ECOLOGICAL INFORMATION

Crystalline Silica (Quartz) – is not known to be ecotoxic; i.e., there is no data that suggests that Crystalline Silica (Quartz) is toxic to birds, fish, invertebrates, microorganisms, or plants.

SECTION # 13 – DISPOSAL CONSIDERATIONS

Dispose of waste materials in compliance with applicable Federal, State and Local Regulations.

SECTION # 14 - TRANSPORTATION INFORMATION

This product is not classified as a Hazardous Material under U.S. DOT or Canadian TDG Regulations.

SECTION # 15 – REGULATORY INFORMATION

TSCA No.: Crystalline Silica (Quartz) appears on the EPA TSCA inventory under the CAS # 14808-60-7.

RCRA: Crystalline Silica (Quartz) is not classified as hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR Section 261.

SARA 311 / 312: Hazard categories for SARA Section 311 / 312 reporting: Chronic Health.

CERCLA: Crystalline Silica (Quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) 40 CFR Section 302.

Emergency Planning and Community Right to Know Act: Crystalline Silica (Quartz) is not an extremely hazardous substance under 40 CFR Section 302 and is not a toxic chemical subject to the requirements of 40 CFR Section 313.

Clean Air Act: Crystalline Silica (Quartz) mined and processed by Gagne & Son Concrete Blocks was not processed with or does not contain any Class I or Class II ozone depleting substances.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR Section 175.300(b)(3)(xxvi).

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NTP: Respirable Crystalline Silica (Quartz) is classified as a known human carcinogen.

OSHA / MSHA Hazard Communication: This product is considered by OSHA / MSHA to be a hazardous chemical and should be included in the employer's Hazard Communication Program.

California Proposition 65: Crystalline Silica (Quartz) (airborne particulates of respirable size) is a substance known by the State of California to cause cancer.

WHMIS / DSL: Products containing Crystalline Silica (Quartz) are classified as D2A, E and subject to WHMIS requirements.

SECTION # 16 – OTHER INFORMATION

Hazard Rating (N.F.P.A.) - Health: 1 - Fire: 0 - Reactivity: 0 - Specific: N/A

This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association (N.F.P.A.).

More information on the effects of Crystalline Silica (Quartz) exposure may be obtained from the Occupational Safety and Health Administration (OSHA)(Phone #: 1-800-321-6742; Website: <http://www.osha.gov>) or from the National Institute for Occupational Safety and Health (NIOSH) (Phone #: 1-800-356-4674; Website: <http://www.cdc.gov/niosh>).

Other Precautions: See OSHA Hazard Communication Rule 29 CFR Sections 1910.1200, 1915.99, 1917.28, 1918.90, 1926.59, 1928.21, and state and local worker or community “Right to Know” laws and regulations. We recommend that smoking be prohibited in all areas where respirators must be used.

Warn your employees (and your customers / users in case of resale) by posting, and other means, of the hazard and OSHA precautions to be used. Provide training for your employees about the OSHA precautions.

See also American Society for Testing and Materials (ASTM) Standard Practice E1132-86, “Standard Practice for Health Requirements Relating to Occupational Exposure to Quartz Dust.

Up to 5 x PEL	Any dust respirator
Up to 10 x PEL	Any dust respirator, except single-use or quarter-mask respirator. Any fume respirator or high efficiency particulate filter respirator. Any supplied-air respirator. Any self-contained breathing apparatus.
Up to 50 x PEL	A high efficiency particulate filter respirator with a full faceplate. Any supplied-air respirator with a full faceplate, helmet, or hood. Any self-contained breathing apparatus with a full faceplate.

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Up to 500 x PEL	A type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode.
Greater than 500 x PEL or entry and escape from unknown concentrations	Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive mode. A combination respirator which includes a Type C supplied-air respirator with a full facepiece operated in pressure-demand or other positive pressure continuous-flow mode and auxiliary self contained breathing apparatus operated in pressure-demand or other positive pressure mode.

Abbreviations:

ACGIH	American Conference of Government Industrial Hygenists
ASTM	American Society of Testing Materials
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CL	Ceiling Limit
DOT	U S Department of Transportation
HEPA	High-Efficiency Particulate Air
HIMS	Hazardous Materials Identification System

IARC	International Agency for Research
IDLH	Immediately Dangerous to Life and Health (NIOSH)
mg/M ₃	Milligrams per cubic meter
mm	Millimeter
MSDS	Material Safety Data Sheet
MSHA	Mine Safety and Health Administration
NA	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for occupational Safety and Health
NTP	National Toxicity Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
pH	Negative log of hydrogen ion
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantities
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TWA	Time Weighted Average (8 hour)
URT	Upper Respiratory Tract
WHMIS	Workplace Hazardous Material Information System

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NOTICE:

The data contained in this Material Safety Data Sheet (MSDS) relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that Gagne & Son Concrete Blocks has researched and condensed from multiple sources that they believe to be reliable. Gagne and Son Concrete Blocks makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein by any party. The provision of the information contained herein is not intended to be, and should not be, construed as legal advice or as ensuring compliance with any Federal, State or Local Laws and Restrictions. This information is intended for use by persons having technical skill and at their own discretion and risk.

Since the conditions of the use of their manufactured products are beyond the control of Gagne & Son Concrete Blocks, no Warranty is Made, Expressed or Implied of Merchantability or Fitness for a Particular Purpose or Otherwise.

Reviewed and Revised on 05/09/08

By: James "RED" Veilleux

Safety Director

for

Gagne & Son Concrete Blocks