

# MATERIAL SAFETY DATA SHEET

# SECTION I - CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: DOLOMITE WHMIS – CLASSIFICATION:
D2A: MATERIALS CAUSING OTHER TOXIC EFFECTS

MANUFACTURER'S AND SUPPLIER'S NAME:

**GRAYMONT (NB) INC** 4634, Route 880, Havelock, New Brunswick, E4Z 5K8.

**GRAYMONT MATERIALS (NY) INC.** 111, Quarry Road, Plattsburg, New York, 12901 **GRAYMONT DOLIME (OH) INC** 21880 West, State Route163, Genoa, Ohio 43430

**GRAYMONT (PA) INC.**194, Match Factory Place, Bellefonte, Pennsylvania, 16823 **GRAYMONT (PORTNEUF) INC.**595, boul. Dussault, St-Marc des Carrières, Québec, G0A 4B0 **GRAYMONT (QC) INC.**25 – 206, rue De Lauzon, Boucherville, Québec, J4B 1E7. **GRAYMONT (WESTERN CANADA) INC.**260 – 4311, 12<sup>th</sup> Street N.E., Calgary, Alberta, T2E 4P9

**GRAYMONT WESTERN LIME INC.** 206 N. 6<sup>th</sup> Avenue, West Bend, Wisconsin, 53095

**GRAYMONT (WESTERN US) INC.** 3950 South, 700 East, Suite 301, Salt Lake City, Utah 84107

**GRAYMONT (WI) INC.** Foot of Hill Avenue, Superior, Wisconsin 54880

EMERGENCY TEL. No.: (613) 996 – 6666 CANUTEC (Canada) (800) 424 – 9300 CHEMTREC (US)

Chemical Name
Calcium Magnesium Carbonate

Alkaline earth
Complex mixture - mostly CaMg(CO<sub>3</sub>)<sub>2</sub>

Molecular Weight

Trade Name and Synonyms

Material Use

CaMg(CO<sub>3</sub>) <sub>2</sub> = 184.40 Dolostone, Dolomite, Dolomitic Desulphurization, Mineral filler, Flux, Limestone. Neutralization, aggregates, liming

### SECTION II - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients	Approximate Concentration	C.A.S. Number	Exposure limits (mg/m³)					
			OSHA PEL	ACGIH TLV	RSST VEMP	MSHA PEL	NIOSH REL	NIOSH IDLH
(Complex Mixture)	(% by weight)		(TWA) 8/40h	(TWA) 8/40h	(TWA) 8/40h	(TWA) 8/40h	(TWA) 10/40h	
Calcium Magnesium Carbonate (Dolomite) (Note 3)	60 to 100	16389-88-1	15 (tot dust) 5 (resp dust)	10 (total dust)	Not available	10 (tot dust) 5 (resp dust)	Not available	N/A
Crystalline Silica, Quartz	0 à 0.1 Or 0.1 à 1 (Note 1)	14808-60-7	30/(%SiO <sub>2</sub> )+2 (T) 10/(%SiO <sub>2</sub> )+2 (R)	0.025 (R)	0.1 (R)	30/(%SiO <sub>2</sub> )+2 (T) 10/(%SiO <sub>2</sub> )+2 (R)	0.05 (R)	50

(Note 1): Concentration of crystalline silica in a series of limestone products will vary from source to source. It was not detected on some samples (< 0.1% w/w). Therefore two ranges are being disclosed. (Note 2): ACGIH TLV Version 1973 has been adopted by the Mine Safety Health Administration (MSHA) as the regulatory Exposure Standard. (Note 3): The value is for particulate matter containing no asbestos and less than 1 % crystalline silica. (Note 4): (T) Total Dust; (R): Respirable Dust.

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SECTION III - PHYSICAL AND CHEMICAL DATA						
Physical State Gas □ Liquid □ Solid ☑	Odor and Appearance Odorless – White to gray solid or powder		Odor Threshold (p.p.m.)  Not applicable	Specific Gravity 2.75 – 2.99		
Vapor Pressure (mm)	Vapor Density (Air = 1)	Evaporation Rate	Boiling Point (°C)	Melting Point (°C)		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
Solubility in Water (20°C)	Volatiles (% by volume)	pH (25 °C)	Bulk Density (kg/m³)	Coefficient of water/oil distribution		
0.03 % by weight	Not applicable	Sat. solution 9.0 – 9.2	1440 - 1600	Not applicable		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA							
Flammability							
	If yes, under which conditions?						
Extinguishing Media	Extinguishing Media						
Dolomite does not bur	n. Use d	extinguishing media a	ppropriate to surroun	ding	fire conditions.		
Special Fire Fighting Proce	dures						
Dolomite is generally non-flammable, but ignites on contact with fluorine. Wear adequate personal protection to prevent contact with material or its combustion products. Firefighters should use self-contained NIOSH approved breathing apparatus with full face piece to protect against the products of combustion.							
Flash point (°C) and Metho	d	Upper flammable limit (% by volume)			Lower flammable limit (% by volume)		
Not applicable		Not applicable		Not applicable			
Auto Ignition Temperature (°C)		TDG Flammability Classification		Hazardous Combustion Products			
Not applicable		Non-flammable			None		
Dangerous Combustion Products None							
EXPLOSION DATA							
Sensitivity to Chemical Impa	act Ra	ate of Burning	Explosive Power		Sensitivity to Static Discharge		
Not applicable		Not applicable	Not applicable		Not applicable		
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SECTION V - REACTIVITY DATA					
Chemical Stability Yes ☑ No □	If no, under which conditions?	Dolomite is very stable. Decomposes at 870 °C to form carbon dioxide and calcium and magnesium oxides.			
Incompatibility to oth Yes ☑ No □	ner substances If so, which ones?	Fluorine, magnesium, aluminum, silicon, hydrogen, mercury, aluminum sulfate, ammonium salts, acids.			
Reactivity Yes ☑ No □	If so, under which conditions?	Dolomite is a very stable chemical substance. Decomposition does not occur at normal temperatures (inferior to 600°C). Reacts chemically with strong acids to form calcium and magnesium based compounds and to liberate carbon dioxide.			
Hazardous Decomposition Products		Decomposition at 870°C will produce calcium and magnesium oxides and carbon dioxide.			
Hazardous Polymerization Products		Will not occur.			

## SECTION VI - TOXICOLOGICAL INFORMATION Route of Entry ☑ Skin Contact ☑ Eye Contact ☐ Skin Absorption ☑ Acute □ Chronic Inhalation ☑ Ingestion Inhalation Effects of Acute Exposure to Product: Skin May cause skin irritation. Skin Irritation Data: Skin-Rabbit-500 mg/ 24 h - Moderate. May cause eye irritation with discomfort or pain, local redness and swelling of the conjunctiva. Eyes Eye Irritation Data: Eye-Rabbit-750 μg/ 24 h – Severe. Inhalation If inhaled in form of dust, may cause respiratory tract, irritation / inflammation. Exposure may cause coughing and sneezing. Large amounts may cause chemical pneumonitis. Ingestion Cause gastro-intestinal irritation. If ingested in large quantities may cause nausea, constipation and hypercalcaemia, hemorrhage. Effects of Chronic Exposure to Product: No signs or symptoms of chronic exposure have been reported. This product may contain trace amounts of crystalline silica. Excessive inhalation of respirable crystalline silica dust may result in respiratory disease, including silicosis, pneumoconiosis and pulmonary fibrosis. Irritancy of Product LD<sub>50</sub> of Product (Specify Species and Route) Exposure limits of Product

**Eves** 

None

Sensitization to Product

Not available

None reported

Synergistic materials

# **SECTION VI - TOXICOLOGICAL PROPERTIES (Cont'd)**

Not available

Not available

LC<sub>50</sub> of Product (Specify Species)

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☑ Carcinogenicity □ Reproductive effects □ Tératogenicity □ Mutagenicity

Dolomite is not listed as a carcinogen by ACGIH, MSHA, OSHA, NTP, DFG, RSST or IARC. It may, however, contain trace amounts of Crystalline Silica listed carcinogens by these organizations.

Crystalline Silica, which inhaled in the form of quartz or crystobalite from occupational sources, is classified by <u>IARC</u> as carcinogenic to humans. (Group 1)

Silica, crystalline (Airborne particles of respirable size) is regulated under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (<u>Proposition 65</u>). Crystalline Silica is listed as a chemical known to the State to cause cancer.

<u>NIOSH</u> considers crystalline silica to be potential occupational carcinogen as defined by the OSHA carcinogen policy [29 CFR 1990]. (Ca).

NTP lists respirable Crystalline Silica as known to be human carcinogens based on sufficient evidence of carcinogenicity in humans. (K).

ACGIH lists respirable Crystalline Silica (quartz) as suspected human carcinogen. (A2).

<u>DFG</u> lists respirable Crystalline Silica as a substance that causes cancer in man (1)

RSST lists respirable Crystalline Silica (quartz) as suspected human carcinogen.

SECTION VII - PREVENTIVE MEASURES				
Personal Protective Equipment (PPE)	Wear clean, dry gloves, full length pants over boots, long sleeved shirt buttoned at the neck, head protection and approved eye protection selected for the working conditions.			
Gloves (Specify)	Gauntlets Cuff style.			
Respiratory (Specify)	NIOSH approved respirator. <u>Up to 50 mg/m³</u> : (APF = 5) Any particulate respirator equipped with an N/R/P95, N/R/P99 or N/R/P100 filter and quarter-mask respirator. <u>Up to 100 mg/m³</u> : (APF = 10) Any particulate respirator equipped with an N/R/P95, N/R/P99 or N/R/P100 filter and half-mask respirator. <u>Up to 250 mg/m³</u> : (APF = 25). Any powered, air purifying respirator equipped with an N/R/P95, N/R/P99 or N/R/P100 filter or supplied-air respirator with elastomeric half-mask / facepiece.  For respirable quartz levels that exceed or are likely to exceed an 8-hr TWA of <u>0.1 mg/m³</u> , a NIOSH approved (N/R/P95) dust respirator is recommended.  For respirable quartz levels that exceed or are likely to exceed an 8-hr TWA of <u>0.5 mg/m³</u> , a NIOSH approved HEPA (N/R/P100) filter respirator is recommended.  For respirable quartz levels that exceed or are likely to exceed an 8-hr TWA of <u>5.0 mg/m³</u> , a NIOSH approved positive pressure (SAR), full face respirator or equivalent is recommended.			
Eyes (Specify)	ANSI, CSA or ASTM approved safety glasses with side shields. Tight fitting dust goggles should be worn when excessive (visible) dust conditions are present. Do not wear contact lenses without tight fitting goggles when handling this chemical.			
Footwear (Specify)	Usual protection			
Clothing (Specify)	Fully covering skin.			
Other (Specify)	Evaluate degree of exposure and use PPE if necessary.			

#### SECTION VII - PREVENTIVE MEASURES

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Engineering Controls (e.g. ventilation, enclosed process, specify)

Enclose dust sources; use exhaust ventilation (dust collector) or other engineering controls at handling points to keep airborne levels below recommended exposure limits.

Leak and Spill Procedure

Limit access to trained personnel. Sweep up and place in container. Use industrial vacuums for large spills. Avoid raising dust. Ventilate area.

Waste Disposal

Transport to disposal area or bury. Review Federal, Provincial and local Environmental regulations.

Handling Procedures and Equipment

Avoid eye contact. Minimize dust generation. Wear protective goggles and in cases of insufficient ventilation, use NIOSH approved anti-dust mask. An eye wash station should be readily available where this product is used.

Storage Requirements

Keep tightly closed containers in a cool, dry and well ventilated area, away from acids.

**Special Shipment Information** 

Dolomite is not regulated by the Transportation of Dangerous Goods (TDG) Regulations (Canada) nor the Hazardous Materials Regulations (USA).

#### SECTION VIII - FIRST AID MEASURES

Skin

Carefully and gently brush the contaminated body surfaces in order to remove all traces of Dolomite. Use a brush, cloth or gloves. Remove all Dolomite-contaminated clothing. Rinse contaminated area with lukewarm water. If irritation occurs or persists seek medical attention.

Eyes

Immediately rinse contaminated eye(s) with gently running lukewarm water (saline solution is preferred) for 15 to 20 minutes. In the case of an embedded particle in the eye, or If irritation occurs or persists, consult a physician.

Inhalation

Move source of dust or move victim to fresh air. Obtain medical attention immediately. If victim does not breathe, give artificial respiration. Contact a physician immediately.

Ingestion

If victim is conscious, wash out mouth with water. Have conscious person drink several glasses of water to dilute. Induce vomiting. Contact a physician immediately. Never give anything by mouth to an unconscious or convulsing person.

General Advise

Consult a physician for all exposures except minor instances of inhalation.

#### SECTION IX - REGULATORY INFORMATION

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Superfund Amendments and Reauthorization Act of 1986 (**SARA Title III**). / The Emergency Planning and "Community Right-to-Know" Act (**EPCRA**). / Comprehensive Environmental Response, Compensation and Liability Act (**CERCLA**). / Resource Conservation and Recovery Act (**RCRA**).

Component Dolomite has been reviewed against the following regulatory listings:

- SARA Section 302 Emergency Planning Notification. Extremely Hazardous Substances (EHS) List and Threshold Planning Quantity (TPQ). (40 CFR, Part 355, Section 30): Not listed.
- SARA Section 304 Emergency Release Notification. Extremely Hazardous Substances (EHS) and Reportable Quantity (RQ) List. (40 CFR, Part 355, Section 40): Not listed.
- SARA Section 311/312 Hazard Categories (40 CFR, Part 370): This product is not listed under CFR 1910.1200 (OSHA Hazard Communication).
- SARA Section 313 Toxics Release Inventory (TRI). Toxic Chemical List (40 CFR, Part 372): Not listed.
- CERCLA Hazardous Substance (40 CFR, Part 302): Not listed in Table 302.4.
- RCRA Hazardous Waste Number (40 CFR, Part 261, Subpart D): <u>Not listed</u>.
- RCRA Hazardous Waste Classification (40 CFR, Part 261, Subpart C): Not classified.

CWA 311. - Clean Water Act List of Hazardous Substances.

Dolomite does not appear on the Clean Water Act (CWA) list of hazardous substances.

California Proposition 65.

Component Dolomite does not appear on the above regulatory listing. This product may contain small amounts of crystalline silica. Silica, crystalline (Airborne particles of respirable size) is regulated under California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Crystalline silica is listed as a chemical known to the State to cause cancer.

Transportation - Hazardous Materials Regulations (USA) & Transportation of Dangerous Goods (TDG) Regulations (Can).

Dolomite does not appear on the above regulatory listings.

Toxic Substances Control Act (TSCA).

All naturally occurring components of this product are automatically included in the USEPA TSCA Inventory List per 40 CFR 710.4 (b). All other components are one the USEPA TSCA Inventory List. Dolomite is exempt from reporting under the inventory update rule.

Canadian Environmental Protection Act (CEPA) – Substances Lists (DSL/NDSL).

Dolomite is specified on the Non-Domestic Substances List (NDSL).

ANSI/NSF 60 - Drinking Water Treatment Additives.

Not applicable

FDA - U.S. Food and Drug Administration, Department of Health and Human Services.

Not applicable

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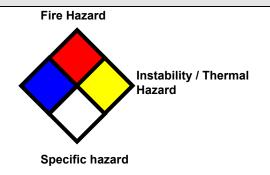
## **SECTION X - OTHER INFORMATION**

Hazardous Materials Identification System (U.S.)



National Fire Protection Association (U.S.) NFPA 704

Health Hazard NFPA has not assigned a rating to Dolomite.



WHMIS Classification:

"D2A" Materials causing other toxic effects.

Symbol:

#### Additional Information/Comments:

The technical data contained herein is given as information only and is believed to be reliable.

GRAYMONT makes no guarantee of results and assumes no obligation or liability in connection therewith.

## Sources Used:

NFPA, NLA, TDG, CSST, RSST, (LSRO-FASEB), Hazardous Products Act, Environment Canada, Enviroguide, OSHA, ACGIH, IARC, NIOSH, CFR, NTP, HSDB, EPA SRS, RTECS, DFG, Chemistry and Technology of Lime and Limestone (John Wiley and Sons, Inc.), Lime and Limestone (WILEY-VCH).

SECTION XI - PREPARATION INFORMATION					
Prepared by:	Telephone number:	Date :			
GRAYMONT (QC) INC.					
Quality Assurance & Technical Services	(450) 449-2262	May 2012			

An electronic version of this MSDS is available at: <a href="www.graymont.com">www.graymont.com</a> under the PRODUCTS section.