

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Limestone  
**Synonym/s:** High Calcium Limestone; Hi-Cal Limestone; Calcium Carbonate; Treated Limestone  
**Chemical Name:** Calcium Carbonate      **Chemical Formula:** CaCO<sub>3</sub>  
**Product Use/s:** Mineral Filler

<b>Manufacturer:</b>	<b>US Operations:</b>	<b>Canadian Operations:</b>
	Lhoist North America 3700 Hulen St. Fort Worth, TX 76107 817-732-8164	Lhoist North America of Canada, Inc. 20303-102B Ave. Langley, BC V1M 3H1 604-888-4333

**Emergency Phone:** Chemtrec 1-800-424-9300

**SECTION 2: HAZARDS IDENTIFICATION**

**Emergency Overview:** Limestone is an odorless white, grayish-white or tan material that ranges from pebble to a granular powder. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract. Limestone reacts with acid to form CO<sub>2</sub>.

**Potential Health Effects**

**Eyes:** Contact can cause irritation of eyes.

**Skin:** Contact can cause mild irritation of skin.

**Ingestion:** In large amounts, this material may cause gastrointestinal irritation or blockage.

**Inhalation:** This product can cause mild irritation of the respiratory system. Long-term exposure may cause permanent damage. Limestone is not listed by MSHA, OSHA, or IARC as a carcinogen. However, this product may contain trace amounts of crystalline silica in the form of quartz or cristobalite, which has been classified by IARC as a Group I carcinogen to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.

**Potential Environmental Effects:** None

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient	Chemical Formula	Common Name	Conc. (%)	CAS
Calcium Carbonate	CaCO <sub>3</sub>	Limestone	> 95	1317-65-3
Crystalline Silica	SiO <sub>2</sub>	Quartz	< 2	14808-60-7

(Crystalline Silica is reported as total silica and not just the respirable fraction)

**SECTION 4: FIRST AID MEASURES**

**Eyes:** Immediately flush eyes with generous amounts of water or eye wash solution if water is unavailable. Pull back eyelid while flushing to ensure that all limestone dust has been washed out. Seek medical attention promptly if the initial flushing of the eyes does not remove the irritant. Do not rub eyes.

**Skin:** Brush off or remove as much dry limestone as possible. Wash exposed area with large amounts of water.

**Inhalation:** Move victim to fresh air. Seek medical attention.

**Ingestion:** Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.

**Medical Conditions Aggravated by Exposure:** Contact may aggravate disorders of the eyes, skin, gastrointestinal tract, and respiratory system.

## SECTION 5: FIREFIGHTING MEASURES

**Fire Hazards:** Limestone is not combustible or flammable. This product is not considered to be an explosion hazard, although reaction with incompatible materials, such as acids, may rupture containers.

**Suitable Extinguishing Media:** N/A

**Fire Fighting Instructions:** N/A

**Hazardous Combustion Products:** Not applicable

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Spill / Leak Procedures:** Use proper protective equipment.

**Small Spills:** Use dry methods to collect spilled materials. Avoid generating dust. Residue on surfaces may be water washed.

**Large Spills:** Use dry methods to collect spilled materials. Avoid generating dust. Residue on surfaces may be water washed.

**Containment:** Minimize dust generation and prevent bulk release to sewers or waterways.

**Clean-up:** Normal housekeeping can be applied.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Use routine safety measures to keep dust from coming into contact with eyes and avoid respiration.

**Storage:** Store in a cool, dry and well-ventilated location.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	OSHA PEL, TWA 8/40h (mg/m3)	ACGIH TLV, TWA 8/40h (mg/m3)	NIOSH REL, TWA 8/40h (mg/m3)	NIOSH IDLH (mg/m3)
Calcium Carbonate	15 (total dust) 5 (respirable)	10	10 (total dust) 5 (respirable)	n/a
Crystalline Silica	10/(SiO <sub>2</sub> % + 2) (respirable)	0.025 (respirable)	0.05 (respirable)	50

**Engineering Controls:** Provide ventilation adequate to maintain PELs.

**Respiratory Protection:** Use NIOSH/MSHA approved respirators if airborne concentration exceeds PELs.

**Skin Protection:** Use appropriate gloves and footwear to prevent skin contact and the potential for irritation. Clothing should fully cover arms and legs.

**Eye Protection:** Use safety glasses with side shields or safety goggles.

**Other:** Eye wash fountain/stations and emergency showers should be available.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b> White, grayish-white or tan lumps or powder	<b>Odor:</b> Odorless	<b>Physical State:</b> Solid
<b>Melting Point (°C/°F):</b> n/a	<b>Boiling Point (°C/°F):</b> n/a	
<b>Specific Gravity</b> 2.6 - 2.9 g/cc		
<b>Vapor Pressure (mm Hg):</b> n/a	<b>Vapor Density:</b> n/a	<b>Evaporation Rate:</b> n/a
<b>pH (25°C/77°F):</b> 8 - 9	<b>Solubility in Water:</b> Not readily soluble in water.	

**SECTION 10: STABILITY AND REACTIVITY**

- Stability:** Chemically stable, but reacts vigorously with acids to form CO<sub>2</sub>. Ignites on contact with Fluorine.
- Hazardous Decomposition/Products:** Limestone decomposes at 950°C / 1742°F to produce calcium oxide and CO<sub>2</sub>.
- Hazardous Polymerization:** Does not occur
- Incompatibility/Conditions to Avoid:** Limestone should not be mixed or stored with the following materials, due to the potential for vigorous reaction and release of heat:

Fluorine	Ammonium salts
Aluminum	Hydrogen
Magnesium	Acids

**SECTION 11: TOXICOLOGICAL INFORMATION**

An LD50 of 6450mg/kg (Rat, oral) has been identified for this product. Limestone is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain trace amounts of crystalline silica, which has been classified by IARC as carcinogenic to humans when inhaled in the form of quartz or crystobalite.

**SECTION 12: ECOLOGICAL INFORMATION**

- Ecotoxicity:** None expected.
- Environmental Fate:** This material shows no bioaccumulation effect or food chain concentration toxicity.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the U.S. Resource Conservation and Recovery Act (RCRA).

**SECTION 14: TRANSPORTATION INFORMATION**

Limestone is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

**SECTION 15: REGULATORY INFORMATION**

- U.S. EPA Regulations:** RCRA Hazardous Waste Number (40 CFR 261.33): not listed  
 RCRA Hazardous Waste Classification (40 CFR 261): not classified  
 CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001;  
 CWA, Sec. 311(b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), not listed  
 SARA 311/312 Codes: not listed  
 SARA Toxic Chemical (40 CFR 372.65): not listed  
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): not listed, Threshold  
 Planning Quantity (TPQ): not listed  
 All chemical ingredients are listed on the US EPA TSCA Inventory List.

**OSHA/MSHA**

**Regulations:** Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): 5mg/M<sup>3</sup> TWA-8  
 MSHA: not listed  
 OSHA Specifically Regulated Substance (29 CFR 1910): not listed

**State Regulations:** Consult state and local authorities for guidance. Components found in this product may contain trace amounts of inherent naturally occurring elements (such as, but not limited to arsenic and cadmium) that may be regulated under California Proposition 65 and other States regulations.

**Canada:** WHMIS Classification: "D2A" Materials Causing Other Toxic Effects  
 Canada NDSL: Listed

**SECTION 16: OTHER INFORMATION**

**Prepared By:** Lhoist North America, Technical Services  
**Date Prepared:** August 6, 2012 **Revision:** 2012-4



**NFPA Hazard Class:** Health: 1 Flammability: 0 Instability: 0

**HMIS Hazard Class:** Health: 1\* Physical  
 Flammability: 0 Hazard: 0 Specific Hazard: ALK

**Abbreviations:**  
 N/A Not Available or Not Applicable  
 IARC International Agency for Research on Cancer  
 IATA International Air Transport Association  
 ACGIH American Conference of Governmental Industrial Hygienists  
 TWA Time Weighted Average  
 PEL Permissible Exposure Limit  
 TLV Threshold Limit Value  
 REL Recommended Exposure Limit

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