

MATERIAL SAFETY DATA SHEET (MSDS) FOR LIMESTONE

(Complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200)

Section 1 - IDENTIFICATION

Supplier/Manufacturer

Emergency Contact Information

Oldcastle® Industrial Minerals 550 S. Biesecker Road Thomasville, PA 17364

(717) 792-2631 (Laboratory - Ext. 235) Bob Segal VP Tech Services Cell Phone: 1-(717)-891-0802

Product name and synonyms

OC L&G Pulverized Limestone, Water Neutralizer, Soil Doctor EZ Spread Granular, Soil Doctor Pulverized Garden Lime, Pulverized Calcitic Aglime, Pulverized Dolomitic Aglime, Dune Grit II, Guide Line Field Marker, Turf Liner

Chemical family

<u>Formula</u>

Limestone/Dolomite (CAS #1317-65-3)

Limestone Dolomite
CaCO₃ 95.0% - 87.0% CaCO₃ - 54.1%
MgCO₃ - 11.0% MgCO₃ - 43.9%

Section 2 - COMPONENTS

Hazardous Ingredients

Respirable quartz (CAS# 14808-60-7) – greater than 0.1% by weight, Less than 1.0% ACGIH TLV-TWA (2000) = 0.05 mg respirable quartz dust/m³
OSHA PEL (8-hour TWA) = (10 mg respirable dust/m³/(percent silica + 2)
NIOSH REL (8-hour TWA) = 0.05 mg respirable dust/m³

Section 3 - HAZARD IDENTIFICATION

Potential Health Effects

Relevant Routes of Exposure:

Eye contact, skin contact, inhalation, and ingestion.

Effects Resulting from Eye Contact:

Exposure to airborne dust may cause immediate or delayed irritation or inflammation. Eye contact by large amounts of dry powder or splashes of wet limestone dust may cause effects ranging from moderate eye irritation to corneal abrasions. Such exposures may require immediate first aid (see Section 4) and medical attention to prevent damage to the eye.

Effects Resulting from Skin Contact:

Direct contact may cause irritation by mechanical abrasion.

Effects Resulting from Inhalation:

Limestone may contain trace amounts of free crystalline silica. Prolonged exposure to respirable free silica can aggravate other lung conditions and cause silicosis, a disabling and potentially fatal lung disease.

Exposure to limestone dust may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system. It may also leave unpleasant deposits in the nose.

Effects Resulting from Ingestion:

Although small quantities of dust are not known to be harmful, ill effects are possible if larger quantities are consumed.

Carcinogenic potential:

Limestone is **not** listed as a carcinogen by NTP, OSHA, or IARC. It may however, contain trace amounts of substances listed as carcinogens by these organizations.

Crystalline silica, which is a component of limestone, is now classified by IARC as known human carcinogen (Group I). NTP has characterized respirable silica as "reasonably anticipated to be [a] carcinogen".

Medical conditions which may be aggravated by inhalation or dermal exposure:

Pre-existing upper respiratory and lung diseases.

Section 4 - FIRST AID

Eyes

Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician if irritation persists or later develops.

Skin

Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation persists or later develops.

Inhalation of Airborne Dust

Remove to fresh air. Seek medical help if coughing and other symptoms do not subside.

Ingestion

Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

Section 5 - FIRE AND EXPLOSION DATA

Flash pointNone	Lower Explosive LimitNone
Upper Explosive LimitNone	Auto ignition temperatureNot Combustible
Extinguishing mediaNot Combustible	Special fire fighting ProceduresNone
Hazardous combustion productsNone	Unusual fire and explosion hazardsNone

Section 6 - ACCIDENTAL RELEASE MEASURES

Collect dry material using a scoop. Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin.

None of the components of this product are subject to the reporting requirements of Title III of SARA 1986, and 40 CFR 372.

Section 7 - HANDLING AND STORAGE

Follow the personal protection and controls set forth in Section 8 of this MSDS when handling this product. Respirable crystalline silicacontaining dust may be generated during processing, handling and storage.

Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin Protection

Wash dust-exposed skin with soap and water before eating, drinking, smoking, and using the toilet facilities. Wash work clothes after each use.

Respiratory Protection

Avoid actions that cause dust to become airborne. Use local or general exhaust ventilation to control exposures below applicable exposure limits.

Use NIOSH/MSHA approved (under 30 CFR 11) or NIOSH approved (under 42 CFR 84) respirators in poorly ventilated areas, if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation. (Advisory: Respirators and filters purchased after June 10, 1998 must be certified under 42 CFR 84.)

Ventilation

Use local exhaust or general dilution ventilation to control exposure within applicable limits.

Eye Protection

Safety glasses with side shields should be worn as minimum protection. In extremely dusty environments and unpredictable environments wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with products which may generate airborne dust.

Section 9 - PHYSICAL AND CHEMICAL, PROPERTIES

Physical state......Solid Odor......No distinct odor Solubility in water...Negligible Vapor pressure......Not applicable

Vapor density......Not applicable Boiling point......Not applicable (i.e., > 1000 C)

Melting point......Not applicable Specific gravity (H20 = 1.0).....2.55-2.85

Evaporation rate.....Not applicable

Section 10 - STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with incompatible materials (see below).

Incompatibility

Materials to avoid include; powerful oxidizing agents such as fluoride, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen defluoride. Contact of these materials may cause fire and/or explosions. Silica dissolves in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

Hazardous decomposition

Will not spontaneously occur. Silica-containing respirable dust particles may be generated by handling.

Hazardous Polymerization

Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

For a description of available, more detailed toxicological information contact the supplier or manufacturer.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

No recognized unusual toxicity to plants or animals

Relevant physical and chemical properties

(See Sections 9 and 10.)

Section 13 - DISPOSAL

Pickup and reuse clean materials. Dispose of waste materials in accordance with applicable federal, state, and local laws and regulations.

Where applicable, dispose of bags in an approved landfill or incinerator.

Section 14 - TRANSPORTATION DATA

Hazardous materials description/proper shipping name

Not hazardous under U.S. Department of Transportation (DOT) regulations.

Hazard classIdentification numberNot applicable.Not applicable

Required label text Hazardous substances/reportable quantities (RQ)

Not applicable. Not applicable.

Section 15 - OTHER REGULATORY INFORMATION

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Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200

Limestone is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

Status under CERCLA/SUPERFUND 40 CFR 117 and 302

Not listed.

Hazard Category under SARA(Title III), Sections 311 and 312

Limestone qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III), Section 313

Not subject to reporting requirements under Section 313.

Status under TSCA (as of May 1997)

Some substances in limestone are on the TSCA inventory list.

Status under the Federal Hazardous Substances Act

Limestone is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65

This product contains up to 0.05 percent of chemicals (trace elements) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

Section 16 - OTHER INFORMATION

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Other important information

This product should only be used by knowledgeable persons. While the information provided in this material safety data sheet is believed to provide a useful summary of the hazards this product as it is commonly used, the sheet cannot anticipate and provide the all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product.

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