

MATERIAL SAFETY DATA SHEET

Section 1 - IDENTIFICATION

Product Name: Limestone

CAS Reg. No.: 1317-65-3

Trade Names: Limestone

MSDS Information: This MSDS supersedes prior MSDS's for the products noted above.

Informational Phone Numbers: (800) 437-7762 Customer Service - Nazareth, PA
 (800) 336-0366 Customer Service - Speed, IN
 (800) 624-8986 Customer Service - Martinsburg, WV
 (800) 386-2111 Customer Service - Mississauga, ONT

Emergency Contact Information: (800)-424-9300 Chemtrec

MSDS Prepared by: Essroc MSDS Development Committee - (610) 837-6725 – May 9, 2014

Section 2 - COMPONENTS

Hazardous Ingredients:

Component	CAS No.	OSHA PEL (8-hour TWA)	ACGIH TLV	Other Information
Limestone	1317-65-3	15 mg total dust/m ³ 5 mg respirable dust/m ³	10 mg/m ³	IDLH: Not Determined LD ₅₀ : No Data
Crystalline Silica (1 - 10%)	14808-60-7	For mineral dusts containing crystalline silica: (10 mg respirable dust/m ³)/(%SiO ₂ +2) (30 mg total dust/m ³)/(%SiO ₂ + 2)	0.025 mg/m ³ respirable	IDLH: 50 mg/m ³ (twa) LD ₅₀ : ipr rat LD Lo 400 mg/kg
Notes:				

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Limestone is an odorless, grey, white, and tan rock that can be present in particles ranging in size from powder to boulders. A single short-term exposure to limestone presents little or no hazard.

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. Such exposures require immediate first aid (see Section 4) and medical attention to prevent significant damage to the eye.

Effects resulting from skin contact: Exposure to limestone dust may cause dry skin, abrasions, discomfort, and irritation.

Effects resulting from inhalation: Inhalation of dust may cause nose, throat, or lung irritation depending on the extent of the exposure. Limestone contains free crystalline silica. Prolonged exposure to airborne free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or other diseases. (also see "Carcinogenic potential" below.)

Effects resulting from ingestion: Although ingestion of small quantities of limestone is not known to be harmful, ill effects are possible especially if larger quantities are consumed. Limestone should not be eaten.

Carcinogenic potential: Limestone is not listed as a carcinogen by the National Toxicology Program (NTP), International Agency for Research (IARC) or the Occupational Safety and Health Administration (OSHA). However, Limestone contains crystalline silica which is classified by IARC and NTP as a known human carcinogen.

Medical conditions which may be aggravated by exposure: Pre-existing upper respiratory and lung diseases may be aggravated by inhalation of limestone dust.

Section 4 - FIRST AID

Eyes: Immediate flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes including under lids, to remove all particles. Seek medical attention for abrasions.

Skin: Wash skin with cool water and pH-neutral soap or a mild detergent intended for use on skin. Seek medical treatment for rash or irritation.

Inhalation of Airborne Dust: Remove to fresh air. Seek medical help if coughing and other symptoms do not subside. ("Inhalation" of gross amounts of Limestone requires immediate medical attention.)

Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water and seek medical attention immediately.

Section 5 - FIRE AND EXPLOSION DATA

Limestone is not combustible.

Flash Point:	Not applicable	Upper Explosive Limit:	Not applicable
Auto ignition temperature:	Not applicable	Lower Explosive Limit:	Not applicable
Auto ignition temperature:	Not applicable	Extinguishing media:	Not applicable
Hazardous combustion products:	Not applicable	Unusual fire and explosion hazards:	None
Special fire fighting procedures:	Contact with powerful oxidizing agents may cause fire and/or explosions.		

Section 6 - ACCIDENTAL RELEASE MEASURES

Place spilled material into a container. Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment as described in Section 8.

Dispose of waste material according to local, state, and federal regulations.

Section 7 - HANDLING AND STORAGE

Dust containing respirable crystalline silica may be generated during processing, handling, and storage. The exposure controls and personal protective equipment identified in Section 8 should be used as appropriate.

Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin protection: Wash dust exposed skin with soap and water before eating, drinking, smoking, and using toilet facilities. Launder clothing that has become dusty before reuse.

Respiratory protection: Avoid actions that cause dust to become airborne. Use local or general 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.

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

Eye protection: When engaged in activities where limestone dust could contact the eye, wear safety glasses with side shields or goggles. 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 in dusty conditions.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Angular grey, white, or tan particles ranging in size from powder to boulders.	Odor:	No distinct odor
Physical state:	Solid	pH (in water):	Neutral
Solubility in water:	Not soluble	Vapor pressure:	Not applicable
Vapor density:	Not applicable	Boiling point:	Not applicable
Melting point:	Not applicable	Specific gravity (H ₂ O=1.0):	2.6 – 2.8
Evaporation Rate:	Not applicable	Coefficient of oil to water distribution:	Not applicable

Section 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: Avoid contact with incompatible materials.

Incompatibility: Contact with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride may cause fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

Hazardous decomposition: Will not spontaneously occur. Limestone decomposes at 825°C producing calcium oxide.

Hazardous polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

Route of Entry.....	Section 3
Effects of acute exposure to product.....	Section 3
Effects of chronic exposure to product.....	Section 3
Exposure Limits.....	Section 2
Irritancy of product.....	Section 3
Sensitization to product	Section 3
Carcinogenicity.....	Section 3
Reproductive Toxicity.....	Not Applicable
Teratogenicity.....	Not Applicable
Mutagenicity.....	Not Applicable
Toxicologically synergistic products.....	Section 3, Section 16

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

Dispose of waste material according to local, state, and federal regulations.

Section 14 - TRANSPORTATION DATA

Hazardous materials description/proper shipping name: Limestone is not hazardous under U.S. Department of Transportation (DOT) regulations.

Hazard class: Not applicable.

Identification number: Not applicable

Required label text: Not applicable.

Hazardous substances/reportable quantities (RQ): Not applicable

Section 15 - OTHER REGULATORY INFORMATION

Status under USDOL-OSHA & MSHA Hazard Communication Standards (29CFR 1910.1200 & 30CFR Part 47): Limestone is considered a "hazardous chemical" under these regulations, 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- 312: Limestone qualifies as a "hazardous substance" with delayed health effects.

Status under SARA Title III, Section 313: Not subject to the reporting requirements under Section 313.

Toxic Substance Control Act (TSCA): Exempt.

Status under Canadian Environmental Protection Act: Not listed.

Status under WHMIS: Limestone containing crystalline silica is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A – Materials causing other toxic effects) and, depending on use, is subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

SECTION 16 - OTHER INFORMATION

Abbreviations:

ACGIH	American Conference of Government Industrial Hygienists
ASTM	American Society of Testing Materials
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
DOT	Department of Transportation
IARC	International Agency for Research
IDLH	Immediately dangerous to life and health (NIOSH).
m ³	cubic meter
mg	Milligram
mm	millimeter
MSDS	Material Safety Data Sheet
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicity Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RQ	Reportable Quantities
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TWA	Time Weighted Average
URT	Upper Respiratory Tract
WHMIS	Workplace Hazardous Material Information System

Other important information:

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