



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Limestone**

Synonyms

- #1 Limestone; #3 Limestone; #4 Limestone; ¾" Minus, Sugar Rock; 5/8"-7/8" Chips; Fine Grind Limestone; Rip Rap

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Used in flue gas desulfurization and to condition soil. Used as a calcium supplement in livestock feed.

Details of the supplier of the safety data sheet

Manufacturer

- Montana Limestone Company
PO Box 166
Frannie, WY 82423-0166
United States
www.basinelectric.com

Telephone (General) • (406) 764-2513

Emergency telephone number

Manufacturer

- (701) 223-0441

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Eye Irritation 2
Carcinogenicity 1A
Specific Target Organ Toxicity Repeated Exposure 1

Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Causes serious eye irritation
 May cause cancer through inhalation.
 Causes damage to organs - Lungs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Do not handle until all safety precautions have been read and understood.
 Do not breathe dust.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear appropriate gloves/protective clothing/eye protection/face protection.
- Response** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 IF exposed or concerned: Get medical advice/attention.
 Get medical advice/attention if you feel unwell.
- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

- OSHA HCS 2012** • Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Calcium Carbonate	CAS:471-34-1 EC Number:207-439-9	95% TO 98%	Ingestion/Oral-Rat LD50 • 6450 mg/kg	OSHA HCS 2012: Eye Irrit. 2	NDA
Silica, amorphous	CAS:7631-86-9 EC Number:231-545-4	4.49%	NDA	OSHA HCS 2012: Not Classified	NDA
Quartz	CAS:14808-60-7 EC Number:238-878-4	0% TO 4.49%	NDA	OSHA HCS 2012: Carc. 1A; STOT RE 1 (Lungs)	NDA
Magnesium Carbonate	CAS:12125-28-9 EINECS:235-192-7	3%	NDA	OSHA HCS 2012: Not Classified	NDA
Aluminum oxide	CAS:1344-28-1 EC Number:215-691-6	< 0.38%	Inhalation-Rat LC50 • 0.2 mg/L 5 Hour(s) 28 Week(s)	OSHA HCS 2012: STOT RE 2 (Lungs, Inhl)	NDA
Iron oxide	CAS:1309-37-1 EC Number:215-168-2	< 0.29%	NDA	OSHA HCS 2012: Not Classified	NDA

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation**
- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
- Skin**
- In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses if worn. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- Rinse mouth. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- In case of fire use media as appropriate for surrounding fire.

- Unsuitable Extinguishing Media**
- No data available.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Negligible fire hazard when exposed to heat or flame.

- Hazardous Combustion Products**
- No data available.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Ventilate the area before entry. Do not walk through spilled material.

- Emergency Procedures**
- As an immediate precautionary measure, isolate spill or leak area for at least 25 meters (75 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. Keep unauthorized personnel away.

Environmental precautions

- Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Avoid generating dust.
SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Use only in well ventilated areas. Avoid breathing nuisance dust. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage

- Ventilate enclosed areas. Keep container closed.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	0.025 mg/m ³ TWA (respirable fraction)	0.05 mg/m ³ TWA (respirable dust)	Not established
Iron oxide (1309-37-1)	TWAs	5 mg/m ³ TWA (respirable fraction)	5 mg/m ³ TWA (dust and fume, as Fe)	10 mg/m ³ TWA (fume); 15 mg/m ³ TWA (total dust, listed under Rouge); 5 mg/m ³ TWA (respirable fraction, listed under Rouge)
Aluminum oxide (1344-28-1)	TWAs	1 mg/m ³ TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	Not established	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Silica, amorphous (7631-86-9)	TWAs	Not established	6 mg/m ³ TWA	Not established
Calcium Carbonate (471-34-1)	TWAs	Not established	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	Not established

Exposure controls

Engineering Measures/Controls

- Dilution ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- At a minimum, safety glasses should be worn when limestone dust is present. May need to consider wearing safety goggles if dust concentration is heavy.

Skin/Body

- Wear appropriate gloves.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White to gray solid with no odor.
Color	White to gray.	Odor	Odorless
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	9.7 when mixed with water
Specific Gravity/Relative Density	1.4 to 1.7 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available.

Incompatible materials

- None

Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Calcium Carbonate (95% TO 98%)	471-34 -1	Irritation: Eye-Rabbit • 750 µg 24 Hour(s) • Severe irritation

Silica, amorphous (4.49%)	7631-86-9	Acute Toxicity: Inhalation-Rat LCLo • >200 g/m ³ 1 Hour(s); <i>Lungs, Thorax, or Respiration:</i> Fibrosis, focal (pneumoconiosis); Irritation: Eye-Rabbit • 25 mg 24 Hour(s) • Mild irritation
Quartz (0% TO 4.49%)	14808-60-7	Acute Toxicity: Inhalation-Human TCLo • 16 mppcf 8 Hour(s) 17.9 Year(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> Fibrosis, focal (pneumoconiosis); <i>Lungs, Thorax, or Respiration:</i> Cough; <i>Lungs, Thorax, or Respiration:</i> Dyspnea; Multi-dose Toxicity: Inhalation-Rat TCLo • 25 mg/m ³ 5 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> Fibrosis, focal (pneumoconiosis); <i>Lungs, Thorax, or Respiration:</i> Sputum; <i>Immunological Including Allergic:</i> Increase in cellular immune response; Inhalation-Rat TCLo • 15 mg/m ³ 79 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> Fibrosing alveolitis; <i>Lungs, Thorax, or Respiration:</i> Other changes; <i>Biochemical:Metabolism (intermediary):</i> Effect on inflammation or mediation of inflammation; Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s) 71 Week(s)-Intermittent; <i>Tumorigenic:</i> Carcinogenic by RTECS criteria; <i>Liver:</i> Tumors
Aluminum oxide (< 0.38%)	1344-28-1	Multi-dose Toxicity: Inhalation-Rat LC50 • 0.2 mg/L 5 Hour(s) 28 Week(s) • Comments: Rat Lung, Thorax, or Respiration: Structural or functional change in trachea or bronchi Lung, Thorax, or Respiration: Chronic pulmonary edema or congestion
Iron oxide (< 0.29%)	1309-37-1	Multi-dose Toxicity: Inhalation-Rat TCLo • 500 µg/m ³ 24 Hour(s) 61 Day(s)-Continuous; <i>Brain and Coverings:</i> Other degenerative changes; <i>Blood:</i> Changes in serum composition (e.g., TP, bilirubin cholesterol); <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:</i> True cholinesterase; Mutagen: DNA damage • Unreported Route-Human • Lung (Somatic cell) • 40 ug/disk 4 Hour(s); Tumorigen / Carcinogen: Subcutaneous-Rat TDLo • 135 mg/kg; <i>Tumorigenic:</i> Equivocal tumorigenic agent by RTECS criteria; <i>Tumorigenic:</i> Tumors at site of application

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • No data available
Skin corrosion/Irritation	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2
Skin sensitization	OSHA HCS 2012 • No data available
Respiratory sensitization	OSHA HCS 2012 • No data available
Aspiration Hazard	OSHA HCS 2012 • No data available
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available
Toxicity for Reproduction	OSHA HCS 2012 • No data available
STOT-SE	OSHA HCS 2012 • No data available
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

Potential Health Effects

Inhalation

Acute (Immediate)

- Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)

- Chronic overexposure to dust containing respirable sized crystalline silica can cause delayed lung injury (silicosis).

Skin

Acute (Immediate)

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available.

Ingestion**Acute (Immediate)**

- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed)

- No data available.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

Carcinogenic Effects			
	CAS	IARC	NTP
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen

Key to abbreviations

LC = Lethal Concentration

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information**Toxicity**

- Non-mandatory section - information about this substance not compiled for this reason.

Persistence and degradability

- Non-mandatory section - information about this substance not compiled for this reason.

Bioaccumulative potential

- Non-mandatory section - information about this substance not compiled for this reason.

Mobility in Soil

- Non-mandatory section - information about this substance not compiled for this reason.

Other adverse effects

- Non-mandatory section - information about this substance not compiled for this reason.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user • None specified.**Transport in bulk according** • No data available

to Annex II of MARPOL 73/78
and the IBC Code

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic

Inventory		
Component	CAS	TSCA
Aluminum oxide	1344-28-1	Yes
Calcium Carbonate	471-34-1	Yes
Iron oxide	1309-37-1	Yes
Magnesium Carbonate	12125-28-9	No
Quartz	14808-60-7	Yes
Silica, amorphous	7631-86-9	Yes

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	1.0 % de minimis concentration (fibrous forms)
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
• Magnesium Carbonate	12125-28-9	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed
U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)		
• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Female		
• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Male		
• Iron oxide	1309-37-1	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Calcium Carbonate	471-34-1	Not Listed
• Quartz	14808-60-7	Not Listed
• Magnesium Carbonate	12125-28-9	Not Listed

Other Information

- **WARNING:** This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date	• 12/January/2016
Preparation Date	• 02/September/1988
Disclaimer/Statement of Liability	• The information contained in this Safety Data Sheet (SDS) is believed to be correct since it was obtained from sources we believe are reliable. However, no representation, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material, or the results to be obtained from the use thereof. User assumes all risks and liability of any use, processing or handling of any material, variation in methods, conditions

and equipment used to store, handle, or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at his sole discretion. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility of provide a safe work place to examine all aspects of its operation and to determine if or where precautions, in addition to those described herein, are required.

Key to abbreviations

NDA = No Data Available