

SDS - Safety Data Sheet

1. IDENTIFICATION

Product Identifier: Calcium Carbonate

Synonyms: Ground Limestone

Trade Name: PureCal™ 3m, 3T, 4m, 6m, 12, 12X, 16, 16E, 30, 30E, 40, 50, 60, 60E, 325, 6-10, 6-20, 12-40, 16-200, 30-200,40-200, 50-200, C200, CalRite, Calcite, Field Lime, Shell Cal

Recommended Use: Animal feed, animal pharmaceuticals, agricultural uses, glass, pH adjustment

Recommended Restrictions: All users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulation.

Manufacturer Name: Cerne Calcium Company, 2123 200th Street, Fort Dodge, IA 50501 USA
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2. HAZARDS IDENTIFICATION

Hazard Classification of the Chemical:

Specific Target Organ Toxicity - Repeated Exposure, Category 1

Signal Word: Danger

Hazard Statement: May cause eye irritation. May cause cancer if inhaled. Causes damage to organs through prolonged or repeated exposure.

Pictogram:



Precautionary Statements:

Prevention: Wear eye protection.
Avoid breathing dust. Wear respiratory protection (in case of inadequate ventilation).

Response:

IF ON SKIN: Rinse with water.

IF IN EYES: Rinse with water, seek medical attention if discomfort continues.

IF INHALED: Move the exposed person to fresh air, keep at rest and comfortable.

IF SWALLOWED: Rinse mouth.

Storage: Keep product dry.

Disposal: Generally inert. Dispose in accordance with regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Chemical Name: Limestone
Synonyms: Calcium Carbonate; Whiting
CAS Number: 1317-65-3

Limestone is a natural occurring mineral substance consisting primarily of calcium carbonate with lesser amounts of dolomite together with many other ingredients in small but varying amounts.

<u>Compound</u>	<u>CAS Number</u>	<u>Typical Concentration, %</u>
Calcium Carbonate	471-34-1	97-99
Magnesium Carbonate	546-93-0	0.5-1.5
Crystalline Silica	14808-60-7	0.01-0.4

4. FIRST AID MEASURES

Eye Contact:	Do not rub eyes. Contact with dust may cause irritation by mechanical abrasion. Irrigate eyes immediately with clean water. Obtain medical attention if necessary.
Skin Contact:	Wash skin with soap and water.
Ingestion:	If significant – obtain medical attention. Do not induce vomiting.
Inhalation:	Dust may irritate the nose, throat and respiratory tract by mechanical abrasion. Coughing, sneezing and shortness of breath may occur following exposures in excess of appropriate exposure limits. Move to fresh air. If breathing is difficult give oxygen and seek medical attention.
Most important symptoms or side effects:	Dust may irritate the respiratory tract, eyes and skin.
Recommendations for immediate medical care and special treatment:	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Non-flammable.
Extinguishing media to avoid:	No specific information.
Hazards of concern:	During fire, gases hazardous to health may be formed.
Advice for fire fighters:	Standard personal protective equipment including self-contained breathing apparatus and full protective clothing.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards:	Not flammable or combustible.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use adequate ventilation or dust mask approved by NIOSH/MSHA. Wear adequate eye protection and appropriate protective clothing.
Emergency Procedures:	No special emergency procedures, use adequate ventilation.
Containment:	Contain and cover spill to minimize dust emission.
Cleanup Procedures:	Clean up by sweeping, shoveling, vacuuming, or flushing with water. Avoid the generation of dust during clean up.
Neutralizing Chemicals:	None required.
Disposal:	Generally inert. Dispose in accordance with regulations – or recycle and use beneficially in other applications.

7. HANDLING & STORAGE

Precautions for safe handling:	Use adequate ventilation and/or dust mask approved by NIOSH/MSHA. Wear adequate eye protection. Exposed skin may become dry and irritated with prolonged contact. Avoid contact with food and ingestion.
Storage:	Keep product dry. Do not store with acids or oxidizing agents. Provide proper ventilation when handling this material to minimize dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Compound	Exposure Limit (mg/m)
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Calcium Carbonate (CaCO3)	OSHA PEL (TWA) 8/40h (mg/m3)	ACGIH TLV (TWA) 8/40h (mg/m3)	MSHA/PEL (TWA) 8/40h (mg/m3)	NIOSH REL (TWA) 8/40h (mg/m3)
	T=15 R=5	TLV Withdrawn	T=15 R=5	T=10 R=5
Crystalline Silica (1)	T= 30 (%SiO2)+2 R=10/(%SiO2)+2	R = 0.025	T= 30 (%SiO2)+2 R=10/(%SiO2)+2	R = 0.05 (free silica)

Limestone is not a carcinogen listed by ACGIH, MSHA, OSHA, NTP, DFG, RSST or IARC. However, crystalline silica may be trace amounts at or above detection levels (<0.1%). Occurrence is dependent upon the stone source, process and specific application. Two ranges are disclosed for (T) Total Dust and (R) Respirable Dust.

Engineering Control Measures

- Eye Wash: Ensure that eye wash stations are close to the workplace location.
- Exposure: Evaluate degree of exposure and use PPE as necessary.
- Ventilation: Local exhaust or ventilation adequate to reduce exposures below appropriate limits.
- Other: Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure and enclosed employee work stations.

Personal Protective Equipment

- Eye Protection: ANSI, CSA or ATM approved glasses or goggles. Dust goggles should be worn if excessive emissions are present and when wearing contact lenses.
- Respiratory Protection: Follow OSHA respirator guidelines found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- Hand Protection: No special requirements. Wear gloves to protect skin.
- Skin Protection: No special requirements. Wear appropriate clothing to minimize skin contact.
- Footwear: No special requirements.
- Hygiene: Wash dust-exposed skin with soap and water before eating, drinking, smoking and using toilet facilities. Wash work clothes after each use.

9. PHYSICAL CHEMICALS PROPERTIES

Appearance

Physical state	Solid
Form/color	Off white granular or white powder
Upper/lower flammability or explosive limits:	Non-flammable, Non-explosive
Odor:	Negligible
Vapor pressure:	NA
Odor threshold:	NA
Vapor density:	NA
pH:	8.5 – 9.5 at 10% solids
Relative density:	55-95 lb/ft ³
Melting point:	Decomposes @ 1799° Fahrenheit
Freezing Point:	NA
Solubility in water:	Negligible
Boiling point:	NA
Flash point:	NA
Evaporation rate:	NA
Flammability:	Not flammable
Partition coefficient:	NA
Auto-ignition temperature:	NA
Decomposition temperature:	825° C
Viscosity:	NA

NA – not applicable

10. STABILITY AND REACTIVITY

- Reactivity: Reacts with acid to form Carbon Dioxide (CO₂).
- Stability: Stable under normal conditions.
- Hazardous: Calcium oxide will form at high sustained temperatures.

Incompatibility: Avoid 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.

Decomposition: Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride yielding possible fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

- Acute: Routes of entry – Skin Contact; Eye Contact; Inhalation; Ingestion
- Skin: May dry and irritate skin and mucus membranes:
- Eyes: Eye irritation with possible discomfort or pain, local redness and swelling of the conjunctiva.
- Inhalation: Harmful if inhaled. May cause respiratory tract irritation/inflammation. Exposure may cause coughing and sneezing. Large amounts may cause chemical pneumonitis.
- Ingestion: May cause gastro-intestinal irritation. If ingested in large quantities may cause nausea, constipation and hypocalcaemia and hemorrhage.
- Sensitization: No sensitizing effect known.
- Chronic: No signs or symptoms of chronic exposure of limestone 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.
- Carcinogenicity: Limestone is not a carcinogen listed by ACGIH, MSHA, OSHA, NTP, DFG, RSST or IARC. Limestone may contain trace amounts of Crystalline Silica which is listed by these organizations as a carcinogen.
- NTP lists respirable Crystalline Silica as known to be human carcinogens based on sufficient evidence of carcinogenicity in humans.
 - IARC classifies Crystalline Silica as (Group 1) carcinogenic to humans if inhaled in the form of quartz or cristobalite from occupational sources.
 - NIOSH considers Crystalline Silica to be a potential occupational carcinogen as defined by the OSHA carcinogen policy (29 CFR 1910.1001).
 - California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) regulated respirable Crystalline Silica.
 - ACGIH list respirable Crystalline Silica (quartz) as suspected human carcinogen (A-2).
 - RSST lists respirable Crystalline Silica (quartz) as suspected human carcinogen.

12. ECOLOGICAL INFORMATION

- Toxicity: Aquatic toxicity foreseeable as nonrelevant.
- Persistence and degradability: No relevant information available.
- Ecological information: Non-biodegradable but soluble in weak acid.
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- Additional information: Product generally considered non hazardous as a water pollutant.
- PBT and vPvB assessment: Not applicable.
- Marine pollutant: Not classified.
- Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Spillage generating dust may expose cleanup personnel to respirable crystalline silica. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Do not dry sweep spilled material without PPE. Prevent spilled materials from inadvertently entering streams, drains or sewers.

14. TRANSPORTION INFORMATION

UN Number: Not applicable.
UN Proper shipping names: Not applicable.
Transport Hazard Class: Not applicable.
Packaging group: Not applicable.

Shipping and Transportation - Limestone is classified as a non-hazardous material by the Canadian Transportation of Dangerous Good (TDG) Regulations and the US Department of Transportations (DOT).

EU Transportation: Road (ADR); Rail (RID); Sea (IMDG); Air (ICO/IATA) – not restricted.

International Maritime Dangerous Goods (IMDG Code) – Not classified.

Transport in bulk EU Annex II of MARPOL73/78 and the IBC Code) – Not applicable.

15. REGULATORY INFORMATION

State: Consult local and state hazard communication regulations.
Federal: FDA: 21 CFR 175.105; 21 CFR 175.300; 21 CFR 176.170; 21 CFR 176.180;
21 CFR 177.1210; 21 CFR 178.3297; 40 CFR 180.1011:©
TSCA/DSL: Listed under CAS 1317-65-3 Exempt from DSL as naturally occurring.
CONEG: Materials used to manufacture packaging are CONEG compliant.
CWA: Not considered to be a water pollutant.
WASTE: Waste is not subject to RCRA and acceptable at landfills as a “solid waste”. Product can often be beneficially reused or recycled for other purposes.
SPILLS: Sweep up spillage in dry form where possible
OSHA: Labeling required under OSHA Hazard Communication Standard (29 CFR 1910.1200 (f) and other applicable state and local laws and regulations.
PROP 65: WARNING: This product MAY contain chemical(s) known to the state of California to cause cancer.
NAFTA: Product qualifies under HS Tariff No 2521.00 as 100% US Origin, Preference Criteria A.
EU Directive: Not classified as hazardous for supply (1999/45/EC).

SARA304: NO	SARA311: YES**	SARA312: possibly
SARA313: NO	NJRTK: YES	CAPROP65: YES
CANDSL: YES	EINECS: YES	RCRA: NO

Additional Information: **SARA311: listed. ACGIH TLV assigned.

16. OTHER INFORMATION

The information contained in this Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of the product since the conditions of use are beyond our control. Nothing contained herein should be construed as recommendation to use this product in conflict with federal or state regulations or existing patents covering any material or its use.

For more information contact:
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