



# SDS – SAFETY DATA SHEET

## 1. IDENTIFICATION

**Product Identifier:** CALCIUM CARBONATE

**Synonyms:** Feeding Limestone

**Chemical Formula:** CaCO<sub>3</sub>

**Product Name:** Unical-UF, Unical-P, Unical-C, Unical-S, Unical-M, Unical-L, Fre-Flo, LOL#3, Unical-F, Shell and Bone Builder Blend, Shell & Bone Builder

**Recommended Use of the Chemical:** Animal feed, animal pharmaceutical, agricultural applications

**Manufacturer / Supplier:** ILC RESOURCES

**Address:** 3301 106th Circle, Urbandale, IA 50322-3740

**Website:** <http://www.ilcresources.com>

**Phone:** 515-243-8106

**24 hour Emergency Phone:** 515-243-8106

## 2. HAZARD(S) IDENTIFICATION

**Classification of the Substance or Mixture:**

STOT SE3

**Risk Phrases:**

R37: Irritating to respiratory system.

**Label Elements:**

**Signal Word:** Warning

**Pictogram:**



**Hazard Statements:**

H335: May cause respiratory irritation.

H351: May cause cancer.

**Precautionary Statements:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray

P284: Wear respiratory protection (in case of inadequate ventilation).

**HMIS / NFPA Hazard Rating:**

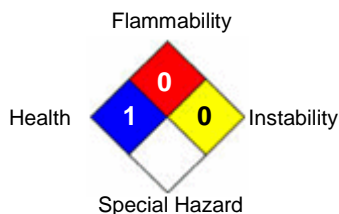
4=EXTREME

3= SERIOUS

2= MODERATE

1=SLIGHT

0=MINIMAL



**Canada – WHMIS:** Classification D2A (Toxic if Qtz > 0.1%)

**GHS Classification:** Respiratory Irritation (Category 3)

### 3. COMPOSITION INFORMATION / INGREDIENTS

| Ingredient                       | CAS Number | EC Number | Percent |
|----------------------------------|------------|-----------|---------|
| Calcium Carbonate                | 471-34-1   | 207-439-9 | 98-99%  |
| Silica (SiO <sub>2</sub> ) Total | 14808-60-7 | 231-545-4 | <1.5%   |

### 4. FIRST – AID MEASURES

**Inhalation:** If a person breathes in large amounts of this material, move the exposed person to fresh air at once. Other measures are usually unnecessary.

**Ingestion:** No special precautions.

**Skin Contact:** No special precautions; flush with water.

**Eye Contact:** If material comes in contact with the eyes, promptly wash the eyes with water. Get medical attention if any discomfort continues.

### 5. FIRE-FIGHTING MEASURES

**Fire:** Not flammable.

**Explosion:** Not an explosion hazard.

**Fire Extinguishing Media:** Water, water fog, Foam, dry chemical powder, Carbon Dioxide. Use appropriate media to extinguish source.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode, if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Avoid dust formation. Avoid breathing vapors, mist or gas. Wear appropriate personal protective equipment as specified in Section 8.

**Environmental Precautions and Methods and Materials for Containment and Cleaning Up:** No special environmental precautions required. Sweep up and shovel. Keep in suitable, closed containers for disposal. Calcium Carbonate (Limestone) is not classified as a “toxic pollutant” or a “hazardous substance” under Sections 307 and 311 of the Clean Water Act. Accidental spills can be cleaned up by sweeping, vacuuming, or flushing with water. Under Code of Federal Registry -- (Title 21CFR § 582.5191) {...This substance is generally recognized as safe when used in accordance with good manufacturing or feeding practice.} This is known as G.R.A.S.

### 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for Safe Storage, Including Any Incompatibilities:** Store in a dry area; material is an animal feed ingredient. Do not store with incompatible materials (reference Section 10.)

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Compound           | Exposure Limit (mg/m <sup>3</sup> )                          |   |  |  |
|--------------------|--|---|--|--|
|                    | Calcium Carbonate<br>(CaCO <sub>3</sub> ):                   | OSHA PEL<br>(TWA) 8/40h<br>(mg/m <sup>3</sup> ) | ACGIH TLV<br>(TWA) 8/40h<br>(mg/m <sup>3</sup> )         | MSHA/PEL (TWA)<br>8/40h (mg/m <sup>3</sup> ) |
| T=15 R=5           |  | TLV Withdrawn                                   | T=15 R=5   | T=10 R=5                                     |
| Calcium Silica (1) | T = 30 (%SiO <sub>2</sub> )+2<br>R=10/(%SiO <sub>2</sub> )+2 | R=0.025   | T=30 (SiO <sub>2</sub> )+2<br>R=10/(SiO <sub>2</sub> )+2 | R= .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 and 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. 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 the toilet facilities. Wash work clothes after each use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Formula:** CaCO<sub>3</sub>

**Physical State:** Solid

**Stability:** Very Stable

**Explosivity:** Non-explosive

**Volatiles %:** None

**Appearance:** Light gray to tan color; coarse to small granules to powder

**Odor:** Odorless

**Odor Threshold:** Not determined

**pH:** 8.5 – 9.5 at 10% solids

**Freezing Point:** NA

**Melting Point:** 800C (1,472F) - Decomposes on heating

**Boiling Point / Boiling Range:** No data available

**Flash Point:** Not applicable

**Evaporation Rate (BuAC=1):** No data available

**Flammability:** Not flammable

**Upper / Lower Flammability or Explosive Limits:** No data available

**Vapor Pressure (mm Hg):** No data available

**Vapor Density (Air=1):** No data available

**Relative Density:** 2.93 g/cm<sup>3</sup> at 25C (77F)

**Specific Gravity (water=1):** 2.7 – 2.9

**Solubility:** Negligible

**Partition Coefficient: n-octanol / water:** No data available

**Auto-ignition Temperature:** Not applicable

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Molecular Weight:** 100.1 g/mol  
**Additives:** None

## 10. STABILITY AND REACTIVITY

**Reactivity and / or Chemical Stability:** Stable under ordinary conditions of use and storage.

**Possibility of Hazardous Reactions and Conditions to Avoid:** High temperatures above 825C and incompatibles (acids.)

**Incompatible Materials:** Strong oxidizing agents & Acids.

**Hazardous Decomposition Products:** Heating of product above 825C will decompose to Calcium Oxide with release of Carbon Dioxide.

## 11. TOXICOLOGICAL INFORMATION

**Emergency Overview:** CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. NUISANCE DUST.

### Potential Health Effects:

**Inhalation:** Harmful if inhaled. May cause respiratory tract irritation/inflammation. Excessive concentrations of a nuisance dust may cause reactions such as coughing, sneezing and nasal irritation. Large amounts may cause chemical pneumonitis.

**Ingestion:** Non-toxic.

**Skin Contact:** Not expected to be a health hazard from skin exposure.

**Eye Contact:** Nuisance dust may cause mechanical irritation.

**Acute Exposure:** Routes of entry – skin contact, eye contact, inhalation, ingestion

**Chronic Exposure:** 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.

**Aggravation of Pre-existing Conditions:** No data available.

**Carcinogenicity:** Limestone is not a carcinogen listed by ACGIH, MSHA, OSHA, NTP, DFG, RSST or IARC. Limestone may contain trace amounts of Crystalline Silica listed by these organizations as a carcinogen.

Crystalline Silica, if inhaled in the form of quartz or cristobalite from occupational sources, is classified by IARC as (Group 1) carcinogenic to humans.

Respirable Crystalline Silica is regulated under California's Safe Drinking Water and Toxic Act of 1986 (Proposition 65).

NIOSH considers Crystalline Silica to be a potential occupational carcinogen as defined by the PHSA carcinogen policy (29 CFR 1910.1000).

NTP lists respirable Crystalline Silica as known to be human carcinogens based on sufficient evidence of carcinogenicity in humans.

ACGIH list respirable Crystalline Silica (quartz) as suspected carcinogen (A-2).

RSST lists respirable Crystalline Silica (quartz) as suspected human carcinogen.

**Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System:)** No data available.

**Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System:)** No data available.

**Germ Cell Mutagenicity:** No data available.

**Reproductive Toxicity:** No data available.

| Ingredient                   | Known | Anticipated | IARC Category |
|------------------------------|-------|-------------|---------------|
| Calcium Carbonate (471-34-1) | No    | No          | None          |

**Acute Toxicity:**

LD50 Oral - rat - 6,450 mg/kg

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**Results of PBT and vPvB assessment:** No data available.

**Other adverse effects:** No data available.

## 13. DISPOSAL CONSIDERATIONS

Calcium Carbonate (Limestone) is not classified as a hazardous waste under RCRA Section 3001. Use normal waste disposal procedures that are in compliance with federal, state, and local regulations.

## 14. TRANSPORT INFORMATION

**Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)**

Not regulated

**Maritime Transport IMDG/GGVSea**

Not regulated

**Air Transport ICAO-TI and IATA-DGR**

Not regulated

## 15. REGULATORY INFORMATION

**Chemical Inventory Status – Part 1**

| Ingredient                   | TSCA | EC  | Japan | Australia |
|------------------------------|------|-----|-------|-----------|
| Calcium Carbonate (471-34-1) | Yes  | Yes | Yes   | Yes       |

**Chemical Inventory Status – Part 2**

| Ingredient                   | Korea | Canada |      | Phil. |
|------------------------------|-------|--------|------|-------|
|                              |       | DSL    | NDSL |       |
| Calcium Carbonate (471-34-1) | Yes   | Yes    | No   | Yes   |

**Federal, State & International Regulations - Part 1**

|  | SARA 302 | SARA 313 |
|--|----------|----------|
|  |          |          |

| Ingredient                   | RQ | TPQ | List Chemical | Catg. |
|------------------------------|----|-----|---------------|-------|
| Calcium Carbonate (471-34-1) | No | No  | No            | No    |

**Federal, State & International Regulations - Part 2**

| Ingredient                   | RCRA   |        | TSCA |
|------------------------------|--------|--------|------|
|                              | CERCLA | 261.33 | 8(d) |
| Calcium Carbonate (471-34-1) | No     | No     | No   |

| Chemical Weapons Convention: No | TSCA 12(b): No |          | CDTA: No     |
|---------------------------------|----------------|----------|--------------|
| <b>SARA 311/312:</b> Acute: No  | Chronic: No    | Fire: No | Pressure: No |
| Reactivity: No                  | Pure / Solid   |          |              |

**Poison Schedule:** None allocated

**16. OTHER INFORMATION**

*Effective Date:* 07/29/15 – Standardized for GHS / REACH  
*Previous Revision:* 02/10/14

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