



SAFETY DATA SHEET
COLUMBIA RIVER CARBONATES

Product: MICRONA™ Ag Lime Powders
Version: 2.1
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Revision Date: 9/5/2017

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name/Trade Name(s): MICRONA™ Ag H₂O Solution Grade, MICRONA™ ArborCal, MICRONA™ Agricultural Lime

Manufacturer or Supplier's Details:

Company name of supplier: Columbia River Carbonates

Address: 300 N. Pekin Road,
Woodland, WA 98674

Telephone: (360) 225-6505

Emergency Phone: (360) 225-6505

Recommended use of the chemical and restrictions on use:

Recommended Use: Agricultural applications

Restrictions on use: For agricultural use only

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification

Carcinogenicity: Category 1A

GHS Label elements

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H350i May cause cancer by inhalation.

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood

P281 Use personal protective equipment as required.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/attention

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to an approved waste disposal plant

Potential Health Effects

Carcinogenicity:

IARC

Group 1: Carcinogenic to humans

Quartz (SiO₂) CAS# 14808-60-7

NTP

The NTP's Report on Carcinogens lists crystalline silica (respirable size) as a known human carcinogen.



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SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

Hazardous ingredients

Chemical Name	CAS-No.	Typical composition (%)
Ground Calcium Carbonate (GCC)	1317-65-3	95 -100%
Silica, crystalline (quartz)	14808-60-7	0.4%

SECTION 4 – FIRST AID MEASURES

- If inhaled:** Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.
- In case of skin contact:** Wash off with soap and plenty of water.
- In case of eye contact:** Flush thoroughly with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing.
- If swallowed:** Rinse mouth thoroughly with water and drink afterwards plenty of water to dilute material in stomach. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

SECTION 5 – FIRE FIGHTING MEASURES

- Flash Point:** Non-Flammable
- Suitable extinguishing media:** This material is not combustible. Appropriate extinguishing media for surrounding fire should be used.
- Hazardous combustion products:** No hazardous combustion products are known
- Special protective equipment for fire fighters:** In the event of fire, wear self-contained breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Measures should be taken to minimize and protect against airborne dust during cleanup operations, including use of respiratory protective equipment if necessary.
- Environmental precautions:** No special environmental precautions required.
- Methods and materials for containment and cleaning up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7 – HANDLING AND STORAGE

- Advice on Safe Handling:** For personal protection see section 8. No special handling advice required.
- Conditions for safe storage:** Keep container tightly closed in a dry and well-ventilated place.



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Materials to avoid: Do not store near acids.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	CAS #	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ground Calcium Carbonate (GCC)	1317-65-3	TWA (Total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
Silica, crystalline (quartz)	14808-60-7	TWA (respirable fraction)	0.05 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	0.05 mg/m ³	NIOSH REL
		TWA (respirable fraction)	0.025 mg/m ³	ACGIH
		TWA (respirable fraction)	0.1 mg/m ³	OSHA P0
		TWA (respirable fraction)	10 mg/m ³ / %SiO ₂ + 2	OSHA Z-3
		TWA (respirable fraction)	250 mppcf / %SiO ₂ + 5	OSHA Z-3

Personal Protective Equipment

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection remarks: For prolonged or repeated contact, use protective gloves.

Eye protection: Safety Glasses

Skin and body protection: Protective suit

Hygiene measures: General industrial hygiene practice

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder
Color: White
Odor: Characteristic
pH: 8.5-9.5, Concentration: 100g/l (20°C) Method: DIN-ISO 787/9
Melting Point: >800°C
Decomposition: Decomposes below the melting point.
Boiling Point: Decomposition: Decomposes below the boiling point
Flash Point: Non-Flammable
Flammability (solid, gas): Does not ignite
Vapor Pressure: Not applicable
Specific Gravity: 2.71 g/ml
Solubility in Water: 0.014 g/L @ 20°C
Partition coefficient: n-octanol/water: Not applicable
Auto-ignition Temperature: Not applicable
Thermal Decomposition: >600°C
Upper explosion limit: Not explosive
Lower explosion limit: Not explosive

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage conditions.

Chemical Stability: No decomposition if stored and applied as directed.



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Incompatibility (Material to Avoid): Reacts with acids and liberates carbon dioxide. This displaces the oxygen in the air in closed spaces (danger of suffocation).

Hazardous Decomposition Products: Thermal decomposition can produce calcium oxide and carbon dioxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity LD50 Oral (Rat) >5,000 mg/kg

Ingredients:
Limestone:
Acute oral toxicity: LD50 Oral (Rat) >5,000 mg/kg

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization

Product:
No data available

Germ cell mutagenicity
No data available

Carcinogenicity

Ingredients:
Silica, crystalline (quartz):
Carcinogenicity-Assessment: Positive evidence from human epidemiological studies (inhalation)

IARC Group 1: Carcinogenic to humans
Silica, crystalline (quartz) 14808-60-7

NTP Known to be human carcinogen
Silica, crystalline (quartz) 14808-60-7

Reproductive toxicity
No data available

STOT-repeated exposure

Ingredients:
Silica, crystalline (quartz):
Routes of exposure: Inhalation
Target Organs: Lungs
Assessment: May cause damage to organs through prolonged or repeated exposure.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 10,000 mg/l
Exposure time: 96 h



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Toxicity to daphnia and other: EC50 (Daphnia magna (Water flea)): >1,000 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae: NOEC (Desmodesmus subspicatus (green algae)): 75 mg/l
Exposure time: 72 h
EC50 (Desmodesmus subspicatus (green algae)): >200 mg/l
Exposure time: 72 h

Ingredients:

Ground Calcium Carbonate (GCC):

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): >10,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other: EC50 (Daphnia magna (Water flea)): >1,000 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): >200 mg/l
Exposure time: 72 h

Silica, crystalline (quartz):

Toxicity to fish: No toxicity at the limit of solubility

Toxicity to daphnia and other: No toxicity at the limit of solubility
aquatic invertebrates

Toxicity to algae: No toxicity at the limit of solubility

Toxicity to microorganisms: No toxicity at the limit of solubility

Persistence and degradability

Product:

Biodegradability: Not applicable

Bioaccumulative potential

Ingredients:

Ground Calcium Carbonate (GCC):

Partition coefficient: n-
octanol/water Not applicable

Mobility in soil

No data available

Other adverse effects

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone – CAA Section 602 Class I Substances

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, APP. A+B).

Additional ecological information: In solid state, these minerals are a major part of the rocks of the earth's surface. They are dissolved in a natural state and indispensable part of the natural waters. These minerals are not biodegradable. Negative effects on the environment should therefore be excluded. Restrictions may be indicated that concentrated suspensions of these minerals in natural waters may have an unfavorable effect on water organisms (disturbance of the micro flora and fauna in the sediment and subsequent detriment to the existence of higher water organisms).



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Ingredients:

Ground Calcium Carbonate (GCC):

Results of PBT and vPvB: Non-classified PBT substance, Non-classified vPvB substance
assessment

SECTION 13 – DISPOSAL CONSIDERATIONS

From a waste perspective, this product is not considered hazardous and may be disposed of as solid waste in accordance with applicable federal, state, provincial, and local regulations.

SECTION 14 – TRANSPORT INFORMATION

International Regulation

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

Not a DOT hazardous material. Local regulations may apply.

SECTION 15 – REGULATORY INFORMATION

OSHA Hazards: Carcinogen

EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ

SARA 311/312 Hazards:

Acute/Chronic Health Hazard

SARA 302:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III< Section 313.

Clean Air Act:

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This Product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F)

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489)

Clean Water Act:

This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A

This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3

This Product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307



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California Proposition 65:

Warning: Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer.

TSCA:

This product primarily is natural calcium carbonate from limestone ore which is listed on the U.S. EPA TSCA inventory under Limestone, CAS# 1317-65-3. In addition, all other ingredients and/or processing aids are also on the TSCA inventory.

DSL:

By virtue of its status as a “substance occurring in nature”, ground limestone is considered to be on the Canadian Domestic Substances List. In addition, all other ingredients and/or processing aids are also on the DSL.

CONEG:

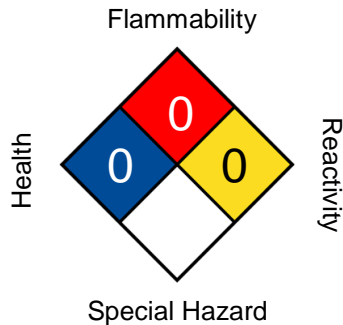
Being derived from limestone ore, this product may contain incidental trace levels of naturally occurring metals. However, no metals are intentionally added and this product complies with the CONEG requirement of <100 ppm of Cd, Cr⁺⁶, Pb, and Hg.

ODCs:

This product does not contain, nor is it produced with, any U.S. EPA-defined Class I or Class II ozone-depleting chemicals.

SECTION 16 – OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1*
FLAMMABILITY	0
PHYSICAL HAZARD	0

Prepared by Technical Support Group

The information contained herein has been compiled by Columbia River Carbonates from sources it considers reliable, and is accurate to the best of Columbia River Carbonates' knowledge. Before using the product identified hereon, the foregoing SDS and the product label should be read carefully. The information contained herein relates only to the product identified hereon, and does not relate to its use in combination with any other material or in any process. Customers are encouraged to conduct their own tests concerning the use of the product identified hereon as each customer's manner and conditions of use and handling may involve additional considerations. Columbia River Carbonates assumes and shall incur no liability for any damages, losses, injuries, costs, or consequential damages that may result from the uses or misuse of the product identified hereon, and the recipient assumes all of such liability.