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SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Trade Name: HydroCal™

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 soil amendment

Restrictions on use: For agricultural use only.

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aqueous slurry
Color	White
Odor	Characteristic

GHS Classification

Not a hazardous substance or mixture

GHS Label element

Not a hazardous substance or mixture

Potential Health Effects

Carcinogenicity:

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

NTP

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

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Hazardous ingredients

Chemical Name	CAS-No.	Typical composition (%)
Limestone	1317-65-3	>= 65 - < 80



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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:** Take off contaminated clothing and shoes immediately. Wash with mild soap and warm water.
- In case of eye contact:** Flush thoroughly with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. If irritation persists, seek medical attention.
- If swallowed:** Rinse mouth thoroughly with water and drink afterwards plenty of water to dilute material in stomach. Do not induce vomiting. Never give anything by mouth to an unconscious person.

SECTION 5 – FIRE FIGHTING MEASURES

- Flash Point:** Non-Flammable.
- 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 a fire, wear self-contained breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Spills/Leaks:** 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:** Wipe up with absorbent material (e.g. cloth, fleece). 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.
- Materials to avoid:** Do not store near acids.
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SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	CAS #	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Limestone	1317-65-3	TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (Total)	10 mg/m ³	NIOSH REL
		TWA (Total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total dust)	15 mg/m ³	OSHA P0
		TWA (Respirable)	5 mg/m ³	OSHA P0

Personal Protective Equipment

Respiratory Protection: If engineering controls and work practices are not effective in controlling exposures, appropriate personal protective equipment including a NIOSH/OSHA approved dust respirator should be worn.

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: Aqueous slurry
Color: White
Odor: Characteristic
Solubility in Water: 0.014 g/L @ 20 °C
Specific Gravity (of solids): 2.71 g/ml
Density of product as sold: 1.7-2.0 g/mL (Density depends on the solids content of the dispersion)
pH: 9.5
Flash Point: Non-Flammable
Flammability (solid, gas): Does not ignite
Upper explosion limit: Not applicable
Lower explosion limit: Not applicable
Vapor pressure: 23 hPa (20 °C, aqueous phase)
Freezing point: 0° C
Boiling Point: 100° C
Thermal Decomposition: >400° C
Viscosity 100-1000 cps (Brookfield, spindle 3, 100rpm)

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage conditions.

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

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

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



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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

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Product:

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

Toxicity to daphnia and other:
aquatic invertebrates ED50 (Daphnia magna (Water flea)): >1,000 mg/l
Exposure time: 48 h

Toxicity to algae: ED50 (Desmodesmus subspicatus (green algae)): >200 mg/l
Exposure time: 72 h

Ingredients:

Limestone:

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

Toxicity to daphnia and other:
aquatic invertebrates ED50 (Daphnia magna (Water flea)): >1,000 mg/l
Exposure time: 48 h

Toxicity to algae: ED50 (Desmodesmus subspicatus (green algae)): >200 mg/l
Exposure time: 72 h

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Persistence and degradability

Product:

Biodegradability: Not applicable

Bioaccumulative potential

Ingredients:

Limestone:

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.

Ingredients:

Limestone:

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

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: No OSHA Hazards


EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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SARA 311/312 Hazards:

No SARA Hazards

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 12 (40 CFR 61).

This Product does not contain any chemicals listed under the U.S. Clean Air Act Section 112@ 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 I 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

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:

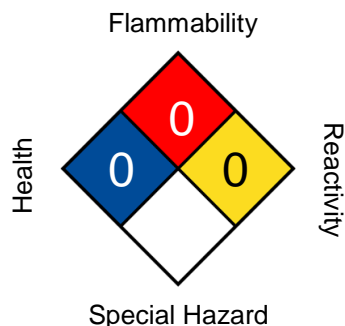
Being derived from limestone ore, this product may contain incidental trace levels of naturally occurring metals. However, no metals are intentionally added and this product complies with the CONEG requirement of <100 ppm of Cd, Cr⁺⁶, Pb, and Hg.

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

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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, injures, 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.