



SAFETY DATA SHEET
COLUMBIA RIVER CARBONATES

Product: Garden Pearls[®] Gypsum
Version: 1.0
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Revision Date: 12/7/15

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name/Trade Name(s): Garden Pearls[®] Gypsum
Common Name: Calcium sulfate dihydrate, gypsum
Chemical Name: Calcium sulfate dihydrate
Chemical formula: CaSO₄ • 2H₂O

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: Applicability for certain crops and soil types should be verified with state and local agricultural extension agents.

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Brown granular mix
Odor	Slight mineral odor

GHS Classification
Health Hazard Class 3

GHS Label element



Hazard Statements: May cause respiratory irritation.

Precautionary Statements: Avoid breathing dust.
Use only outdoors or in a well ventilated area.
If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a Poison Control Center or physician if accidentally inhaled or ingested. Dispose of contents in accordance with local, regional, national regulations.

Eye Contact: Direct contact with dust may cause irritation by mechanical abrasion. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

Skin Contact: Direct contact may cause irritation by mechanical abrasion



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- Ingestion:** May cause irritation to the esophagus and stomach, abdominal spasms and pain. Contact Poison Control if swallowed.
- Inhalation:** May cause minor to moderate irritation. Exposure to dusts generated during the handling or use of the product 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.
- Cancer:** Product may contain crystalline silica as a normal environmental constituent. The amount present based on recent tests indicated less than the mandatory reporting level of 0.1% by weight. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels can be determined by industrial hygiene exposure testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration. Note: Many soil types contain more than 0.1% crystalline silica. This product may add an insignificant level to the overall silica exposure.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients

Chemical Name	CAS-No.	Typical composition (%)
Gypsum (calcium sulfate dehydrate)	10101-41-4	90-95%
Limestone (calcium carbonate)	1317-65-3	< 3%
Calcium Lignosulfonate (stabilizer)	8061-52-7	1-5%

SECTION 4 – FIRST AID MEASURES

- If inhaled:** Move to fresh air in case of accidental inhalation of dust.
If symptoms persist, call a physician.
- In case of skin contact:** Wash thoroughly with soap and water.
Cover irritated area with an emollient.
Seek medical attention if irritation persists.
- In case of eye contact:** In case of contact immediately flush eyes with water for a minimum of 15 minutes.
- If swallowed:** If swallowed, call a poison control center or physician immediately.
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.
Acute Ingestion: GI blockage if material hardens.

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:** Above 1450°C, material can decompose and release sulfur dioxide (SO₂) and oxides of carbon.



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Special protective equipment for fire fighters: In the event of fire, wear self-contained breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Use dry methods to collect spilled materials, and reuse clean materials. Avoid generating dust. Do not clean up with compressed air. Minimize dust by evacuating area downwind in the case of large spills. Shovel or sweep up spilled material and place in dry, sealed plastic or non-aluminum metal containers. Residues on surfaces may be washed with water.

Environmental precautions: No special environmental precautions required. None of the components in this product are subject to the reporting requirements of Title III or SARA, 1986 and 40 CFR

SECTION 7 – HANDLING AND STORAGE

Ensure proper ventilation, and respiratory and eye protection are used under dusty conditions. Dew point conditions or other conditions causing presence of moisture will harden gypsum during storage. Minimize dust generation and accumulation.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Calcium Sulfate Dihydrate, total particulate Particles not otherwise specified (PNOS)	TWA (Respirable)	5 mg/m ³	OSHA Z-1
	TWA (Total)	15 mg/m ³	OSHA Z-1

Personal Protective Equipment

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

Hand protection remarks: Long sleeves and cotton or leather gloves recommended

Eye protection: Safety Glasses with side shield, goggles, or face mask recommended

Ventilation: Local exhaust ventilation recommended

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Granular mix
Color: Light brown
Odor: Slight mineral odor
pH: < 9
Boiling/Melting/Freezing Point: Not applicable
Flash Point: Non-Flammable
Flammability (solid, gas): Does not ignite
Vapor Pressure: N/A
Specific Gravity: 2.19 g/cc
Solubility in Water: 2.1 g/L @ 20°C
Thermal Decomposition: 1450°C
Corrosivity towards steel: 0.56 mm/year



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SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage conditions. Avoid contact with strong acids and strong oxidizers

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

Incompatibility (Material to Avoid): Aluminum (at high temperatures), diazomethane

Hazardous Decomposition Products: When heated to high temperatures above 1450°C, gypsum may emit toxic fumes of oxides of sulfur and calcium

SECTION 11 – TOXICOLOGICAL INFORMATION

Calcium sulfate dihydrate

Exposure route: Inhalation, skin, and/or eye contact.

Target organs: Eyes, skin, respiratory system.

Acute Effect: Calcium sulfate dihydrate dust has an irritant action on mucous membranes of the respiratory tract and eyes. There have been reports of conjunctivitis, chronic rhinitis, laryngitis, pharyngitis, impaired sense of smell and taste, bleeding from the nose and reactions of tracheal and bronchial membranes in exposed workers.

Acute Ingestion: Irritation to the esophagus and stomach, abdominal spasms and pain. GI blockage if material hardens.

Animal Data (Calcium Sulfate Dihydrate)

Acute Oral Toxicity

Species: Rat (Sprague-Dawley)
Route of Administration: Oral (gavage)
Method: OECD Test Guideline 420 (Acute Oral Toxicity-Fixed dose procedure) 2,000 mg/kg body weight of test substance was administered to 4 female rats during main study (50, 300 and 2,000 mg/kg body weight administered during sighting study). No mortality, no specific clinical signs observed during test period.
LD50 (Lethal Dose): > 2,000 mg/kg body weight (category 5 under Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures).

Skin Irritation

Species: Rabbit (New Zealand White)
Test Type: In vivo
Method: OECD TG 404 (1991) "Acute Dermal Irritation/Corrosion" Exposure Period: 4 hours, 500 mg/site/rabbit
No erythema, no eschar and no oedema (score of zero under OECD method: grading of skin reaction) was observed at the skin on the backs of three rabbits during test period.
Result: Not irritating

Skin Sensitization

Species: Guinea pig (Hartley)
Test Type: Buehler test
Method: OECD TG 406 (1991) "Skin Sensitization"
Exposure Period: hours/week for 3 consecutive weeks 0.4 grams/site/guinea pig was applied topically with an occluded patch to the backs of 40 male guinea pigs. After 6 hours, the material was removed and the skin was examined using the sensitization grading system.
Result: Not sensitizing



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Carcinogenicity

None of the components are listed as a carcinogen or suspected carcinogen in the U.S. National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA. Note: This product may contain small quantities of crystalline silica (<0.1%), which has been identified as a carcinogen by the IARC and U.S. NTP.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity (Calcium Sulfate, Dihydrate)

Algae

Method: OECD TG 201, “Alga, Growth Inhibition Test”
Test Species: *Selenastrum capricornutum*
Exposure Period: 72 hours
Endpoint: Growth Rate
EgC50 (Effective growth concentration): > 100 mg/L
EbC50 (Effective biomass concentration) : > 100 mg/L
NOECr (No Observed Effect Concentration – Reproduction): < 100 mg/L
NOECb (No Observed Effect Concentration - Biomass): < 100 mg/L
No significant difference in growth curve between test and control group.

Fish

Method: OECD TG 203 “Fish, Acute Toxicity Test”
Test Species: *Oryzias latipes*
Type: Static
Exposure Period: 96 hours
LC50 (Lethal Concentration): >100 mg/L
No mortality or visible abnormality occurred at the test limit of 100 mg/L.

Invertebrates

Method: OECD TG 202, “Daphnia sp., Acute Immobilisation Test and Reproduction Test”
Test Species: *Daphnia magna*
Type: Static
Exposure Period: 48 hours
EC50 (Effective Concentration) : >100 mg/L
No immobilization or mortality occurred at the test limit of 100 mg/L.

Persistence and degradability

Not relevant for an inorganic compound.

Bioaccumulative potential

Bioaccumulation is not expected

Mobility in soil

Soluble in water and mobile in soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

May be disposed of as an inert solid in sanitary landfill or by other procedures in accordance with all federal, state, and local regulations. May be used as a supplement on land and on some agricultural products.

SECTION 14 – TRANSPORT INFORMATION

DOT Hazard Classification: None

Placard Required: None



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SECTION 15 – REGULATORY INFORMATION

FDA: Product is manufactured for agricultural applications. As such, FDA regulations do not apply.

SECTION 16 – OTHER INFORMATION

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.