

SECTION 1: Identification

1.1. Identification

Product name : BioChar

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Soil amendment mix

1.3. Details of the supplier of the safety data sheet

Freres Lumber Co. Inc.
P.O Box 276
Lyons, OR 97358

1.4. Emergency telephone number

Emergency number : 503-859-2121

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin Irrit. 2 H315
Eye Irrit. 2 H319

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



GHS07

Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Chlorine	(CAS-No.) 7782-50-5	< 2
Sodium	(CAS-No.) 7440-23-5	> 1
Iron	(CAS-No.) 7439-89-6	> 1
Other trace components	-	Balance

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Flush with plenty of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
- First-aid measures after ingestion : Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation : May cause irritation.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use suitable extinguishing media for surrounding fire.
- Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : When heated to decomposition, emits toxic fumes.
- Explosion hazard : None known.

5.3. Advice for firefighters

- Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

None.

6.3. Methods and material for containment and cleaning up

- For containment : No special measures required.
- Methods for cleaning up : Collect spilled material and place in sealed containers for reclamation or disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : No special storage conditions required.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chlorine (7782-50-5)		
ACGIH	ACGIH OEL TWA [ppm]	0.1 ppm
ACGIH	ACGIH OEL STEL [ppm]	0.4 ppm

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Chlorine (7782-50-5)		
OSHA	OSHA PEL (Ceiling)	3 mg/m ³
OSHA	OSHA PEL C [ppm]	1 ppm
IDLH	IDLH [ppm]	10 ppm
NIOSH	NIOSH REL (Ceiling)	1.45 mg/m ³
NIOSH	NIOSH REL C [ppm]	0.5 ppm
Sodium (7440-23-5)		
Not applicable		
Iron (7439-89-6)		
Not applicable		

8.2. Exposure controls

Appropriate engineering controls	: Local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection	: Wear impervious gloves to minimize skin contact.
Eye protection	: Safety glasses.
Skin and body protection	: Wear suitable working clothes.
Respiratory protection	: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: Black to dark gray
Odor	: Burnt wood
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

Not determined.

10.6. Hazardous decomposition products

Not determined.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Chlorine (7782-50-5)	
LD50 oral rat	6800 mg/kg
LC50 Inhalation - Rat [ppm]	293 ppm/1h
ATE US (gases)	700 ppm/4h

Iron (7439-89-6)	
LD50 oral rat	30 g/kg
ATE US (oral)	984 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Chlorine (7782-50-5)	
LC50 - Fish [1]	0.44 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 - Crustacea [1]	0.017 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	0.014 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Chlorine (7782-50-5)	
BCF - Fish [1]	(no bioaccumulation expected)

Sodium (7440-23-5)	
BCF - Fish [1]	(no bioaccumulation expected)

12.4. Mobility in soil

No additional information available

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12.5. Other adverse effects

Effect on the ozone layer : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Chlorine (7782-50-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the United States SARA Section 302
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	10 lb
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SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb
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SARA Section 313 - Emission Reporting	1 %
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Sodium (7440-23-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ	10 lb
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Iron (7439-89-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

Chlorine (7782-50-5)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium (7440-23-5)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.