

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Stormwater Biochar
Product form : Mixtures



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

Soil amendment and filtration media.

1.3. Details of the supplier of the safety data sheet

Stormwater Biochar LLC
6628 SE 68th Ave
Portland, OR 97206 T
(503) 789-6760

1.4. Emergency telephone number

(503) 789-6760

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irrit. 2A H319
Comb. Dust

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

May form combustible dust concentrations in air
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear eye protection, protective gloves, protective clothing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Carbon	(CAS No) 7440-44-0	60 - 100*
Calcium oxide	(CAS No) 1305-78-8	1 - 3*

*In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

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

- Symptoms/injuries : Causes serious eye irritation.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

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

SECTION 5: Fire-fighting measures

5.1. No additional information available Extinguishing media

- Suitable extinguishing media : Water spray. Carbon dioxide. Dry chemical. Foam. Sand.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Dust may be combustible under specific conditions.
- Explosion hazard : Dust may form explosive mixture in air.
- Reactivity : No dangerous reactions known under normal conditions of use. Carbon oxides may be emitted upon combustion of material.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Wear NIOSH-approved self-contained breathing apparatus suitable for the surrounding fire. Evacuate area.
- Protection during firefighting : Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area.

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in section 8.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Sweep up dry powder and dispose properly. Minimize generation of dust.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

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 : Do not handle until all safety precautions have been read and understood. Avoid dust formation. Avoid contact with eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep away from sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a well-ventilated place. Keep away from ignition sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Nuisance dust	
OSHA PEL (TWA) (mg/m ³)	≤ 5 mg/m ³ (Respirable Fraction) ≤ 15 (Total Dust)
Carbon (7440-44-0)	
Remark (ACGIH)	OELs not established
Remark (OSHA)	OELs not established
Calcium oxide (1305-78-8)	
ACGIH TWA (mg/m ³)	2 mg/m ³
Remark (ACGIH)	Upper Respiratory Tract irritation
OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

8.2. Exposure controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. In situations of high dust release from product, the use of explosion-proof equipment is recommended. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

: Gloves. Safety glasses.



Hand protection

: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection

: Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection

: Wear long sleeves, and coveralls to minimize bodily exposure.

Respiratory protection

: Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Pure wood carbon
Color	: Black
Odor	: Odorless
Odor Threshold	: No data available
pH	: 10.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use. Carbon oxides may be emitted upon combustion of material.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid dust formation. Ignition sources. Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Carbon (7440-44-0)

LD50 oral rat	> 10000 mg/kg
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Calcium oxide (1305-78-8)

LD50 oral rat	500 mg/kg
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Skin corrosion/irritation : Not classified pH: 10.5
 Serious eye damage/irritation : Causes serious eye irritation. pH: 10.5
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified
 Specific target organ toxicity (repeated exposure) : Not classified
 Aspiration hazard : Not classified Symptoms/injuries after inhalation
 : May cause respiratory irritation.
 Symptoms/injuries after skin contact : May cause skin irritation.
 Symptoms/injuries after eye contact : Causes serious eye irritation.
 Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
 Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT
 Not hazardous for transport **Additional information**
 Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Stormwater Biochar

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard
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15.2. International regulations

No additional information available.

15.3. US State regulations

WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Arsenic (7440-38-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	No	0.06 (inhalation) 10 (except inhalation) µg/day
Nickel (7440-02-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	Not available

Arsenic (7440-38-2)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
Chromium (7440-47-3)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

Stormwater Biochar

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<p>Nickel (7440-02-0) U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances</p>
<p>Chlorine (7782-50-5) 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 U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List</p>
<p>Phosphorus elemental (7723-14-0) U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - New Jersey - Right to Know Hazardous Substance List</p>
<p>Ammonia (7664-41-7) U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List</p>
<p>Calcium oxide (1305-78-8) U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List</p>

SECTION 16: Other information

Indication of changes : Revision 1.0: New SDS Created.
 Revision date : 04/21/2017
 Other information : Author: BCS.

The above information is based on data which we are aware and believe to be correct at this time. Since conditions of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information.