

Safety Data Sheet

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

Revision date: 09/01/2021 Version: 1.0

SECTION 1: Identification

Identification 1.1.

Product form : Mixture

Product name StormwaterBIOCHAR™, BiocharBASIC™, BioswaleBIOCHAR™



1.2. Recommended use and restrictions on use

Soil amendment and filtration media

1.3. Supplier

Stormwater Biochar LLC 6628 SE 68th Ave Portland, OR 97206

503-789-6760

1.4. **Emergency telephone number**

503-789-6760

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irrit. 2A H319 Comb. Dust

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) May form combustible dust concentrations in air

H319 - Causes serious eye irritation.

: P264 - Wash hands, forearms and face thoroughly after handling. Precautionary statements (GHS US)

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 which do not result in classification

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

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.

09/01/2021 Page 1 StormwaterBIOCHAR™



Safety Data Sheet

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



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.

: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at First-aid measures after skin contact

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.

: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison First-aid measures after ingestion

control center. Get medical attention if you feel unwell.

Most important symptoms and effects (acute and delayed)

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

Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media 5.1.

Suitable extinguishing media : Water spray. Carbon dioxide. Dry chemical. Foam. Sand.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical

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. Special protective equipment and precautions for fire-fighters

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. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

611 For non-emergency personnel

: Wear Protective equipment as described in Section 8. Protective equipment

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders 6.1.2.

Protective equipment : Use personal protective equipment as required.

Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if product enters sewers or public waters.

Methods and material for containment and cleaning up 6.3.

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

Sweep or shovel spills into appropriate container for disposal. This material and its container Methods for cleaning up

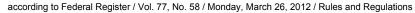
must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available



Safety Data Sheet





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 - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed. 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

Carbon (7440-44-0)			
OSHA	Remark (OSHA)	OELs not established	
ACGIH	Remark (ACGIH)	OELs not established	

Calcium oxide (1305-78-8)				
ACGIH	ACGIH OEL TWA	2 mg/m³		
ACGIH	Remark (ACGIH)	Upper respiratory tract irritation		
ACGIH	Regulatory reference	ACGIH 2018		
OSHA	OSHA PEL TWA [1]	5 mg/m³		
OSHA	Regulatory reference (US-OSHA)	OSHA		

8.2. Appropriate engineering 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. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Individual protection measures/Personal protective equipment 8.3.

Personal protective equipment symbol(s):





Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

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 chemically impervious PPE/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.





Safety Data Sheet





SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular solid.

Color : Black
Odor : Odorless

Odor threshold : No data available

pH : 9.4

Melting point : No data available : No data available Freezing point Boiling point : No data available No data available Flash point Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapour density at 20 °C : No data available Relative density No data available : 0.139 g/cc Density Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available : No data available Decomposition temperature Viscosity, kinematic : No data available : No data available Viscosity, dynamic

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

Explosive properties

Oxidising properties

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

: No data available

No data availableNo data available

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 (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Carbon (7440-44-0

LD50 oral rat > 10000 mg/kg

09/01/2021 Stormwater BIOCHAR

Safety Data Sheet



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

Calcium oxide (1305-78-8)		
LD50 oral rat	500 mg/kg	
Skin corrosion/irritation	: Not classified	
	pH: 9.4	
Serious eye damage/irritation	: Causes serious eye irritation.	
	pH: 9.4	
Respiratory or skin sensitisation	: 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	
Viscosity, kinematic	: No data available	
Symptoms/effects	: Causes serious eye irritation.	
Symptoms/effects after inhalation	: May cause respiratory irritation.	
Symptoms/effects after skin contact	: May cause skin irritation.	
Symptoms/effects after eye contact	: Causes serious eye irritation.	
Symptoms/effects after ingestion	: May cause gastrointestinal irritation.	
Symptoms/effects 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. Disposal methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment

plants.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Transport by sea (IMDG)

Not regulated for transport

Air transport (IATA)

Not regulated for transport





Safety Data Sheet



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

SECTION 15: Regulatory information

15.1. US Federal regulations

Rogue Biochar			
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA			

SARA Section 311/312 Hazard Classes

Physical hazard - Combustible dust
Health hazard - Serious eye damage or eye irritation

15.2. International regulations

No additional information available.

15.3. US State regulations

MARNING:

This product can expose you to Arsenic, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Arsenic(7440-38-2)	X	X			0.06 μg/day (inhalation) 10 μg/day (except inhalation)	
Nickel(7440-02-0)	X					

Component	State or local regulations			
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			
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			
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			
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; U.S Massachusetts - Right To Know List			
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; U.S Pennsylvania - RTK (Right to Know) List			
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			

SECTION 16: Other information

Revision date : 09/01/2021 Other information : Author: JAD.





StormwaterBIOCHAR™

Safety Data Sheet



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

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can

occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS Hazard Rating

NFPA fire hazard

Health : 2 Flammability : 2 Physical : 0

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.