

 ALL POWER LABS <small>Carbon Negative Power & Products</small>		Biochar	Doc. No.	004847
			Doc. Type	SDS
			Rev. Date	9/28/2021
Prepared By: AEN	Approved By: BK		Rev.	2

SAFETY DATA SHEET

Section 1: Identification

Product Name: Biochar – soil amendment prepared from wood

Synonyms: ACV

Recommended Use: Soil Amendment or Soil Conditioner

Company Information:

ALL Power Labs, Inc.
 1010 Murray St.
 Berkeley, CA 94710
 (888) 252- 5324

Emergency Information

In event of emergency, call 911

All Power Labs Emergency Contact – (510)-845-1500

For information about this SDS, use phone#: (510)-845-1500

Section 2: Hazard(s) Identification

Signal Word(s): Warning

Hazard Statements:

- H228 Flammable Solid
- H333 May be harmful if inhaled
- H320 Cause eye irritation
- H305 May be harmful if swallowed and enters airways
- H242 Heating may cause a fire

Pictograms:



Precautionary Statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces – No Smoking
- P261 Avoid breathing dust
- P281 Use personal Protective Equipment as required

Description of other hazards:

Materials may be pyrophoric with moisture content <10% at a temperature >400 deg C where material may smolder.

Biochar produced by the All Power Labs process will be very dry material and typically a very fine particle size. This presents a significant dust hazard, and appropriate personal Protective equipment should be utilized to mitigate irritation associated with dust. P100 type respirators and eye protection are required for handling dry material.

When applying the material may be wetted to minimize dust. Apply biochar under non-windy conditions.

Section 3: Composition/ Information on Ingredients

Main Ingredient: *Gasification product from wood chip waste*

Composition:

Carbon (wood derived). >95%

Water <5%

Other(rock or other material not removed during the sifting process)

CAS #: 7440-44-0

Section 4: First-Aid Measures

After skin contact: Wash contaminated skin with soap and water. Contaminated clothing should be laundered prior to re-use. Seek medical attention if swelling, redness, itching, blistering or irritation persists.

After eye contact: Immediately flush eye with running water for a minimum of 15 minutes. Seek medical attention promptly if irritation persists or any loss of vision occurs.

After inhalation: Promptly remove to fresh air. Seek medical attention if coughing or difficulty breathing persists. Apply artificial respiration if breathing stops.

After swallowing: If a minor amount has been accidentally swallowed, and the person is conscious, give large amounts of water to dilute the stomach.

Seek medical attention. Do not attempt to induce vomiting or give anything by mouth to an unconscious person. If a person vomits, place the person on their side in the recovery position.

Section 5: Fire-Fighting Measures

Specific Hazards: Dust fines may be an explosion hazard if mixed with sufficient air and an ignition source.

Suitable extinguishing agents: Fire Class A, use water spray, dry chemical, carbon dioxide or chemical foam unless there is another risk of an additional class of fire nearby such as flammable liquids.

Special protective equipment for firefighters: Use water to cool exposed containers. If safe to do so, remove containers from the fire area. For major fires, an atmosphere that is oxygen deficient, or an atmosphere that contains an unacceptable level of dust/combustion products, fire-fighters must wear self-contained breathing apparatus with full face-mask and protective clothing.

Retained heat in the biochar can result in a risk of re-ignition for up to 72 hours after extinguishing a fire.

Section 6: Accidental Release Measures

Personal precautions: Appropriate PPE should be used for any clean up.

Measures for environmental protection: None

Measures for cleaning/collecting: Sweep up or vacuum spilled material and place in a suitable container.

Section 7: Handling and Storage

Storage & Handling: Products must be stored in a tightly sealed metal container when first produced from the process. After 1 week from last fill, product may be transferred to non-metallic containers.

When applying the material may be wetted to minimize dust. Apply biochar under non-windy conditions.

Storage: Store below 80 deg C. Not to be stored with oxidizing agents.

Section 8: Exposure Controls/Personal Protection

General protective and hygienic measures: Dry material is a fine dust that will spread easily.

Breathing equipment: P100 respirator is required when handling dusty material.

Protection of hands: Nitrile or other suitable gloves

Eye protection: Safety glasses or goggles to keep dust out of eyes.

Section 9: Physical and Chemical Properties

Form: Solid

Odor: N/A

Odor threshold: N/A

pH: 10-12

Melting point/melting range: N/A

Boiling point/boiling range: N/A

Flash point: N/A

Evaporation rate: N/A

Flammability: 2

Upper/lower flammability or explosive limits: Varies with dust particle size

Minimum Ignition Temperature: ~400 deg C.

Auto ignition temperature: unknown

Vapor pressure: N/A

Vapor density: N/A

Relative density: varies

Solubility in/Miscibility with water: Yes

Section 10: Stability and Reactivity

Reactivity: N/A

Chemical stability: Stable

Conditions to avoid: Exposure to heat

Incompatible materials: Fire

Hazardous decomposition products: N/A

Section 11: Toxicological Information

Acute toxicity: Not classified

Potential routes of exposure/potential health effects

Skin: Not corrosive and not a primary irritant, mild irritation possible due to abrasive action of dust

Eye: May cause eye irritation

Inhalation: Possible mild irritation, due to drying and abrasive action of dust

Ingestion: Not classified

Carcinogenic effects: Not classified

Mutagenic effects: Not classified

Reproductive toxicity: Not classified

Sensitization: Not classified

Target organs: May cause respiratory irritation (single exposure)

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: No additional information available
Mobility: No additional information available
Biodegradation: No additional information available
Bioaccumulation: No additional information available

Section 13: Disposal Considerations (non-mandatory)

Dispose of contents and container in accordance with local, regional and national regulations.

Section 14: Transport Information (non-mandatory)

DOT regulations: Charcoal/Activated Carbon

- **Hazard class:** 4.2 As with Activated Carbon this product is not considered self-heating
- **Land transport ADR/RID (cross-border):** N/A
- **ADR/RID class:** N/A
- **Maritime transport IMDG:** N/A not a marine pollutant.

Air transport ICAO-TI and IATA-DGR: N/A

- **ICAO/IATA Class:** N/A

Section 15: Regulatory Information (non-mandatory)

US Federal Regulations

SARA Section 355 (extremely hazardous substances): No TPQ or RQ associated with this product

SARA Section 311/312 (specific toxic chemical listings): **Acute** (yes), **Chronic** (no); **Fire**(no) **Release of Pressure** (no); **Reactivity** (no)

SARA Section 313 (specific toxic chemical listings): Not reportable under SEC 313 Title III and 40 CFR Part 372

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs): Not considered an air pollutant, no ozone depleting substances

TSCA (Toxic Substances Control Act):

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

Section 16: Other Information

The information contained herein is accurate to the best of our knowledge. All Power Labs makes no warranty with respect hereto said information and disclaims all liability form reliance therein. Changes to unapproved feed stock may result in a different biochar product than covered by this document.

SDS date of preparation/update: 9/28/2021