

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- **Trade name:** Biochar+
- **CAS Number:** 7440-44-0 (Carbon)
- **EC Number:** 231-153-3

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

- **Use of the substance/mixture:** Soil amendment, fertilizer product, growing media additive.
- **Sector of use:** Agriculture, horticulture, landscaping.

1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:** CO2 Products Oy Ahlaistentie 686 29700 Pori, Finland
- **Further information obtainable from:** +358 442355846

1.4 Emergency telephone number

- Emergency contact: +358 0800 147 111 (Note: In an emergency, you may also contact your local Poison Control Center).

2. Hazards identification

2.1 Classification of the substance or mixture

- **Classification according to Regulation (EC) No 1272/2008 [CLP]:** The product is not classified as hazardous according to Regulation (EC) No 1272/2008. Note: Fine dust may cause mechanical irritation to the respiratory tract, skin, and eyes.

2.2 Label elements

- **Hazard pictograms:** Not required.
- **Signal word:** Not required.
- **Hazard statements:** Not required.
- **Precautionary statements: (recommended):**
 - P102 Keep out of reach of children.
 - P260 Do not breathe dust.
 - P280 Wear protective gloves/respiratory protection in dusty conditions.

2.3 Other hazards

- The product contains natural micro-organisms (endomycorrhizal spores).
- Dust may form an explosive mixture with air if concentrations are extremely high in a confined space (not typical in normal use).

3. Composition/information on ingredients

3.1 Mixtures

- **Chemical characterisation:** Mixture.
- **Ingredients:**
 - **Biochar (Granular Carbon, non-activated):** > 90 % (CAS: 7440-44-0)
 - **Beneficial Microbes:** (Mycorrhizal spores, soil bacteria) < 5 %
- The product does not contain PBT or vPvB substances.

4. First aid measures

4.1 Description of first aid measures

- **After inhalation:** Move the exposed person to fresh air. If symptoms (coughing, shortness of breath) persist, seek medical attention.
- **After skin contact:** Wash with soap and water. If skin irritation occurs, seek medical attention.
- **After eye contact:** Rinse eyes cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing to remove particles.
- **After swallowing:** Rinse mouth with water. Drink water. Contact a doctor if nausea or discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed

- Dust may cause temporary mechanical irritation to eyes, skin, or respiratory tract.

5. Firefighting measures

5.1 Extinguishing media

- **Suitable extinguishing agents:** Water spray, foam, carbon dioxide (CO₂), dry powder.

5.2 Special hazards arising from the substance or mixture

- **Combustible at high temperatures.** In case of fire, carbon monoxide (CO) and carbon dioxide (CO₂) may be formed.

5.3 Advice for firefighters

- **Protective equipment:** Wear self-contained breathing apparatus in smoky conditions.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid dust formation. Do not breathe dust. Wear personal protective equipment (see section 8).

6.2 Environmental precautions

- No special environmental risks. Prevent large quantities from entering drains to avoid clogging.

6.3 Methods and material for containment and cleaning up

- Collect mechanically (e.g., by sweeping or vacuuming). Avoid raising dust. Dispose of contaminated material as waste according to item 13.

7. Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation. Avoid breathing dust. Wear suitable protective gloves. Wash hands after handling.

7.2 Conditions for safe storage, including any incompatibilities

- **Storage:** Store in a dry, cool place (recommended < 20 °C).
- **Incompatible materials:** Keep away from strong oxidizing agents (Class 5 materials) and ignition sources.
- **Packaging:** Close the package carefully after use to avoid moisture absorption.

8. Exposure controls/personal protection

8.1 Control parameters

- **Occupational exposure limits:**
 - Organic dust (general): 5 mg/m³ (8h), 10 mg/m³ (15 min) (Values may vary by country).

8.2 Exposure controls

- **Appropriate engineering controls:** Ensure good ventilation during dusty operations.
- **Respiratory protection:** Wear a respirator (Class P2/P3) if dust formation is heavy.
- **Hand protection:** Wear protective gloves (e.g., nitrile rubber) to protect against mechanical abrasion.
- **Eye protection:** Tight-fitting safety goggles if there is a risk of dust generation.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance:** Solid, granular/powder
- **Colour:** Black
- **Odour:** Odourless/Earthy
- **pH-value:** 7.0 – 10.0 (in aqueous solution)
- **Density:** approx. 300–600 kg/m³
- **Solubility:** Insoluble in water.
- **Flammability:** Combustible material (not highly flammable).

10. Stability and reactivity

10.1 Reactivity

- Non-reactive under normal conditions of use.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Conditions to avoid

- Moisture (to prevent clumping), strong oxidizing agents, open flames.

10.4 Incompatible materials

- Strong oxidizing agents.

11. Toxicological information

11.1 Information on toxicological effects

- **Acute toxicity:** Not classified as harmful (based on available data).
- **Skin corrosion/irritation:** Not irritating to skin (mechanical abrasion possible).
- **Serious eye damage/irritation:** Dust may cause mechanical irritation.
- **Respiratory or skin sensitisation:** No known effects. Dust may irritate the respiratory tract.

12. Ecological information

12.1 Toxicity

- **No known adverse effects on aquatic** organisms. The product is a natural soil amendment.

12.2 Persistence and degradability

- Biochar is highly persistent in soil (hundreds of years). Not biodegradable in the traditional sense (carbon sequestration).

12.3 Bioaccumulative potential

- Not expected to bioaccumulate.

13. Disposal considerations

13.1 Waste treatment methods

- **Product:** Can be disposed of by composting or with general waste in accordance with local regulations. Can be used as a soil amendment.
- **Packaging:** Empty packaging can be recycled as plastic or used for energy recovery.

14. Transport information

14.1 UN-Number

- **ADR, IMDG, IATA:** Not regulated. (Note: Only activated carbon can be classified as self-heating (UN 1362); this product is non-activated biochar).

14.2 UN proper shipping name

- **ADR, IMDG, IATA:** Not regulated.

14.3 Transport hazard class(es)

- **ADR, IMDG, IATA:** Not regulated.

14.4 Environmental hazards

- Not applicable.

15. Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **REACH:** The product is exempt from REACH registration (natural substance/recycled) or tonnage is below threshold.
- Complies with national fertilizer legislation.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:** Jaakko Rautio
- **Disclaimer:** The user must verify the suitability of the product for the intended use.