



CARBOTECH®

MATERIAL SAFETY DATA SHEET

Revision 2 – Issue 12/2015

1. Basic Information

Company name:	Carbon Fertilizer Technologies (Pty) Ltd (CFT)
Address:	PO Box 140, Patensie, 6335, SOUTH AFRICA
Contact numbers:	+(27) 42-2830506
Product Name:	CARBOTECH
Product type:	Dark brown liquid
Odor:	Acetic acid odour
Derived from:	Lignin, kelp and polysaccharides.

2. Composition/information on ingredients

Carbotech™ is a unique blend of complex carbohydrates derived from photosynthetic organisms and has a high carbon content

3. Hazards Identification

Likely routes of exposure: Skin contact, ingestion and inhalation.

Skin: Mild irritant. Depending on duration of contact, symptoms will include reddening, discomfort and irritation.

Eye contact: Mild irritant. Could cause mild discomfort, or pain and redness of the eyes.

Ingestion: Harmful. Will cause irritation to mouth, throat, oesophagus and possibly to digestive tract. Can cause gastrointestinal irritation.

Inhalation: Harmful. Irritant to respiratory system.

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4. First Aid Measures

Threshold Limits:	N/A
Effects of overexposure:	Contains acid mixture. May be harmful if swallowed.
Emergency:	If ingested, dilute with large quantities of water or milk. Further dilution possible with diluted bi-carbonate of soda. If spilled on skin or eyes wash off with lots of water.
First aid procedures:	Contact a Physician immediately.
Other health warnings:	None

5. Fire Fighting Measures

Flash point:	Not flammable
Explosive limits:	not combustible
Suitable extinguishing media:	not combustible
Special fire fighting procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual fire explosion hazards:	None

6. Accidental Release Measures

Steps to be taken in case material is released or spilled:

Flush with water.

Waste disposal:

Can be diluted and applied to arable land.

7. Handling and storage

Precautions to be taken:

Store in original container in a dry place. Keep from heating or freezing. Keep out of reach of children.

Other precautions: None.

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8. Exposure controls/personal protection

Ventilation:

Work in ventilated area

Personal protective equipment:

Respiratory protection: Use appropriate respiratory protection if working in an enclosed environment

Protective gloves: Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection: wear goggles or glasses consistent for handling and applying fertilizers.

Other protective equipment: wear clothing consistent for handling and applying fertilizers

9. Physical and chemical properties

A dark brown to black viscous liquid with an acidic odour.

Typical Analysis:

N	5.00 g/kg
P	0.40 g/kg
K	0.10 g/kg
Zn	102.00 mg/kg
Cu	72.40 mg/kg
Fe	53.00 mg/kg
Mn	111.00 mg/kg
Mg	27.00 mg/kg
S	39.00 mg/kg
Organic Carbon	270.00 g/kg

Relative density: 1.25 ± 0.05 g/cm³

Solubility in water: Completely miscible.

Flash point: None. Does not combust

pH: 2.5 - 4.5

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10. Stability and Reactivity

Stability:	Stable
Incompatibility	Alkaline fertilizers like anhydrous ammonia
Hazardous decomposition products:	If burned, CO, CO ₂ and SO ₂ , may be detected
Conditions to avoid:	Extreme heat conditions may allow bacteria and fungi to grow which could give off gasses that might allow cans without breather caps to pressurise and expand.

11. Toxicological Information

May be harmful by ingestion. No toxicological data available to the best of our knowledge.

12. Ecological information

Carbotech contain natural organic acids such as fulvic acid and humic acid. Carbotech is biologically active, as it will stimulate the growth of bacteria and fungi in the soil. As such Carbotech is an effective soil conditioner. Carbotech in diluted form is good for the environment.

In concentrated form the acidity might have negative impact on plant and fish life.

13. Disposal considerations

Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product and do not leave used containers available for drinking water storage. Comply with local legislation applying to waste disposal.

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14. Transport information

14.1.	UN NUMBER:	NOT REGULATED
14.2.	Road Transport ADR/IRD:	NOT REGULATED
14.3.	Maritime Transport IMDG/IMO:	NOT REGULATED

15. Regulatory information

- 15.1. Symbol: Xi,
- 15.2. Indication: Irritant,
- 15.3. Risk phrases:
- R 36/37/38 Irritating to eyes, respiratory system and skin.
- 15.4. Safety phrases:
- S 2 Keep out of reach children.
 - S 3/9/49 Keep only in original container in a cool, well-ventilated place.
 - S 24/25 Avoid contact with skin and eyes.
 - S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

16. Other Information

The above information is believed to be correct, but does not purport to be all-inclusive and shall be used only as a guide. CFT shall not be held liable for any damage resulting from contact with the above product.