

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product name:** CARBON

**CAS number:** 7440-44-0

**EINECS number:** 215-609-9

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

**Use of substance / mixture:** PC21: Laboratory chemicals.

### 1.3. Details of the supplier of the safety data sheet

**Company name:** Elemental Microanalysis Ltd  
1 Hameldown Road Okehampton  
Okehampton  
Devon  
EX20 1UB  
United Kingdom  
**Tel:** 44(0)183754446  
**Fax:** 44(0)183754544  
**Email:** [info@microanalysis.co.uk](mailto:info@microanalysis.co.uk)

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 7990 767375 (24 hours)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Flam. Sol. 2: H228

**Most important adverse effects:** Flammable solid.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H228: Flammable solid.

**Hazard pictograms:** GHS02: Flame



**Signal words:** Warning

**Precautionary statements:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

# SAFETY DATA SHEET

## CARBON

Page: 2

P240: container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.. equipment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P370+378: In case of fire: Use to extinguish.

### 2.3. Other hazards

**Other hazards:** In use, may form flammable / explosive dust-air mixture.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** CARBON. (\*WEL)

**CAS number:** 7440-44-0

**EINECS number:** 215-609-9

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Alcohol resistant foam. Water spray. Carbon dioxide. Dry chemical powder.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Highly flammable. In combustion emits toxic fumes. May form flammable / explosive dust-air mixture.

[cont...]

# SAFETY DATA SHEET

CARBON

Page: 3

## 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Notify the police and fire brigade immediately. Eliminate all sources of ignition.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Smoking is forbidden. Use non-sparking tools. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of dust in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

CARBON.

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL

[cont...]

# SAFETY DATA SHEET

## CARBON

Page: 4

EU	3.5mg/m3	3.5mg/m3	-	-
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### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Respiratory protective device with particle filter.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Powder / Granules

**Colour:** Black

**Odour:** Odourless

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** Insoluble

**Viscosity:** No data available.

**Boiling point/range°C:** >3000

**Melting point/range°C:** 3550

**Flammability limits %: lower:** No data available.

**upper:** No data available.

**Flash point°C:** No data available.

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** No data available.

**Vapour pressure:** <0.01hPa at 20 °C

**Relative density:** 0.250 - 0.600 g/cm3

**pH:** 6.0-9 40 g/l at 25 °

**VOC g/l:** No data available.

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions. Stable at room temperature.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

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# SAFETY DATA SHEET

## CARBON

Page: 5

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Hazardous ingredients:**

**CARBON.**

INTRAVENOUS	MUS	LD50	440	mg/kg
ORAL	RAT	LD50	>8000	mg/kg

**Toxicity values:** No data available.

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

## Section 12: Ecological information

### 12.1. Toxicity

**Hazardous ingredients:**

**CARBON.**

ALGAE	72H ErC50	10000	mg/l
Daphnia magna	96H LC50	5600	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	1000	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Insoluble in water.

[cont...]

# SAFETY DATA SHEET

## CARBON

Page: 6

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Specific regulations:** Not applicable.

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H228: Flammable solid.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.