SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name

Coal Standard

Substance name Carbon

Identification numbers
CAS no. 7440-44-0
EC no. 231-153-3

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

Relevant identified uses of the substance or mixture
chemical analysis
Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
ELTRA GmbH
Retsch-Allee 1-5
42781 Haan
GERMANY
Telephone no. +49 (0) 2104 23 33-400
Fax no. +49 (0) 2104 23 33-499

Information provided by / telephone
+49 (0) 2104 23 33-192
Advice on Safety Data Sheet
info@eltra.com

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0) 551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification information
This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

Not relevant

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization
Substance name Carbon

Identification numbers
CAS no. 7440-44-0
EC no. 231-153-3

3.2 Mixtures

Not applicable. The product is not a mixture.
SECTION 4: First aid measures

4.1 Description of first aid measures
   General information
   In case of persisting adverse effects, consult a physician.
   After inhalation
   Remove affected person from the immediate area. Ensure supply of fresh air.
   After skin contact
   When in contact with the skin, clean with soap and water.
   After eye contact
   Separate eyelids, wash the eyes thoroughly with water (15 min.). Get medical attention if pain still persists.
   After ingestion
   Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
   No data available.

4.3 Indication of any immediate medical attention and special treatment needed
   No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   ABC powder; Sand; Foam; Water spray jet
   Unsuitable extinguishing media
   High power water jet

5.2 Special hazards arising from the substance or mixture
   In case of fires, hazardous combustion gases are formed: Carbon dioxide (CO2); Carbon monoxide (CO)

5.3 Advice for firefighters
   Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel
   Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.
   For emergency responders
   No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
   Do not discharge into surface waters/groundwater.

6.3 Methods and material for containment and cleaning up
   Take up mechanically. Send in suitable containers for recovery or disposal.

6.4 Reference to other sections
   No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Advice on safe handling
   Observe the usual precautions for handling chemicals. Provide good ventilation at the work area (local exhaust ventilation, if necessary).
General protective and hygiene measures
Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Wash soiled clothing immediately.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition. Dust can form an explosive mixture with air. Take precautionary measures against static charges.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels
Always keep in containers of same material as the original. Containers which are opened must be carefully closed and kept upright to prevent leakage.

Incompatible products
Do not store together with: oxidizing agents

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

<table>
<thead>
<tr>
<th>No</th>
<th>Substance name</th>
<th>CAS no.</th>
<th>EC no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carbon</td>
<td>7440-44-0</td>
<td>231-153-3</td>
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<tr>
<td></td>
<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Graphite inhalable dust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WEL long-term (8-hr TWA reference period)</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>List of approved workplace exposure limits (WELs) / EH40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graphite respirable dust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WEL long-term (8-hr TWA reference period)</td>
<td>4 ppm</td>
<td></td>
</tr>
</tbody>
</table>

2 Dust

List of approved workplace exposure limits (WELs) / EH40

<table>
<thead>
<tr>
<th>Dust respirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL long-term (8-hr TWA reference period)</td>
</tr>
<tr>
<td>Comments</td>
</tr>
</tbody>
</table>

List of approved workplace exposure limits (WELs) / EH40

<table>
<thead>
<tr>
<th>Dust inhalable</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL long-term (8-hr TWA reference period)</td>
</tr>
<tr>
<td>Comments</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Appropriate engineering controls
No data available.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer’s instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid
permanent use of protective gloves.

Other
Normal chemical work clothing.

Environmental exposure controls
No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form/Colour</td>
<td>fine-grained powder</td>
</tr>
<tr>
<td></td>
<td>black</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH value</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition point / decomposition range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td></td>
</tr>
</tbody>
</table>
**SECTION 10: Stability and reactivity**

10.1 Reactivity  
No data available.

10.2 Chemical stability  
Stable if stored and handled properly.

10.3 Possibility of hazardous reactions  
No data available.

10.4 Conditions to avoid  
Avoid formation of dust. Heat, naked flames and other ignition sources.

10.5 Incompatible materials  
Oxidizing agents

10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide

**SECTION 11: Toxicological information**

11.1 Information on toxicological effects

- **Acute oral toxicity**  
  No data available

- **Acute dermal toxicity**  
  No data available

- **Acute inhalational toxicity**  
  No data available

- **Skin corrosion/irritation**  
  No data available

- **Serious eye damage/irritation**  
  No data available

- **Respiratory or skin sensitisation**  
  No data available

- **Germ cell mutagenicity**  
  No data available

- **Reproduction toxicity**  
  No data available

- **Carcinogenicity**  
  No data available

- **STOT - single exposure**  
  No data available
STOT - repeated exposure
No data available

Aspiration hazard
No data available

Symptoms related to the physical, chemical and toxicological characteristics
Eye contact may cause mechanical irritation through dust particles.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)
No data available

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.

12.6 Other adverse effects
No data available.

12.7 Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Packaging that cannot be cleaned should be disposed off as product waste. Uncontaminated packaging may be taken for recycling.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN
The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG
The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA
The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not relevant

SECTION 15: Regulatory information

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

EU regulations

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In accordance with the Reach regulation (EC) 1907/2006, the product does not contain any substances that are</td>
</tr>
<tr>
<td>considered as subject to listing in annex XIV, inventory of substances requiring authorisation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REACH CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN (SVHC) FOR AUTHORISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006,</td>
</tr>
<tr>
<td>this substance is not considered as subject to listing in annex XIV, inventory of</td>
</tr>
<tr>
<td>substances requiring authorisation (&quot;Authorization list&quot;).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach</td>
</tr>
<tr>
<td>regulation (EC) 1907/2006.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>This substance is not subject to Part I or 2 of Annex I</td>
</tr>
</tbody>
</table>

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

Further information
Article no.
92511 - 3010
92511 - 3020
92511 - 3030
92511 - 3040
92511 - 3050
92511 - 3060
92511 - 3070
92511 - 3080
92550 - 3020
92550 - 3040
92550 - 3060
92560 - 3010
92560 - 3010
Sources of key data used to compile the data sheet:
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet
UMCO GmbH
Georg-Wilhelm-Str. 187, D-21107 Hamburg
Tel.: +49 40 / 555 546 300  Fax: +49 40 / 555 546 357  e-mail: umco@umco.de

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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