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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>HEXACHLOROBENZENE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number</td>
<td>118-74-1</td>
</tr>
<tr>
<td>EINECS number</td>
<td>204-273-9</td>
</tr>
</tbody>
</table>

### 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

### 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:** Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Carc. 1B: H350; STOT RE 1: H372

**Most important adverse effects:**  
May cause cancer. Causes damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

- **Label elements:**
  - Hazard statements:
    - H350: May cause cancer.
    - H372: Causes damage to organs through prolonged or repeated exposure.
    - H400: Very toxic to aquatic life.
    - H410: Very toxic to aquatic life with long lasting effects.
  - Hazard pictograms:
    - GHS08: Health hazard
    - GHS09: Environmental

[cont...]
Signal words: Danger

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash hands thoroughly after handling.
P308+313: IF exposed or concerned: Get medical attention.
P314: Get medical attention if you feel unwell.

2.3. Other hazards

Other hazards: Danger of serious damage to health by prolonged exposure.
PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: HEXACHLOROBENZENE

CAS number: 118-74-1

EINECS number: 204-273-9

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. Consult a doctor.

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

Ingestion: Wash out mouth with water. 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.

Delayed / immediate effects: Delayed effects can be expected after long-term exposure.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

[cont...]
5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

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. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Evacuate the area immediately.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Alert the neighbourhood to the presence of fumes or gas.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

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:** Ensure there is sufficient ventilation of the area. Wash hands after working with substance.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

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

Section 8: Exposure controls/personal protection

8.1. Control parameters

**Workplace exposure limits:** No data available.
DNEL/PNEC Values

DNEL / PNEC  No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Particle filter class P3S (EN143).

Hand protection: Impermeable gloves.

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

Skin protection: Impermeable protective clothing.

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>State</td>
<td>Powder</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic odour</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available.</td>
</tr>
<tr>
<td>Oxidising</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling point/range°C</td>
<td>323-326</td>
</tr>
<tr>
<td>Melting point/range°C</td>
<td>227-229</td>
</tr>
<tr>
<td>Flammability limits %: lower</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash point°C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Part.coeff. n-octanol/water</td>
<td>No data available.</td>
</tr>
<tr>
<td>Autoflammability°C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>No data available.</td>
</tr>
<tr>
<td>VOC g/l</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

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.

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.
10.4. Conditions to avoid


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

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>10000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>MUS</td>
<td>LD50</td>
<td>4000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>CAT</td>
<td>LD50</td>
<td>1700</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>RBT</td>
<td>LD50</td>
<td>2600</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>GPG</td>
<td>LD50</td>
<td>&gt;3000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>QUAIL</td>
<td>LD50</td>
<td>&gt;6400</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>MAM</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>DUST/MIST</td>
<td>RAT</td>
<td>4H LC50</td>
<td>3600</td>
<td>mg/m3</td>
</tr>
<tr>
<td>DUST/MIST</td>
<td>MUS</td>
<td>4H LC50</td>
<td>4000</td>
<td>mg/m3</td>
</tr>
<tr>
<td>DUST/MIST</td>
<td>CAT</td>
<td>4H LC50</td>
<td>1600</td>
<td>mg/m3</td>
</tr>
</tbody>
</table>

Hazardous ingredients:

HEXACHLOROBENZENE

<table>
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<td>2600</td>
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</tr>
</tbody>
</table>
SAFETY DATA SHEET
HEXACHLOROBENZENE

Relevant hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>--</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

**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**

**Ecotoxicity values:**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUEGILL (Lepomis macrochirus)</td>
<td>96H LC50</td>
<td>7.6</td>
<td>mg/l</td>
</tr>
<tr>
<td>FISH</td>
<td>NOEC 96H</td>
<td>0.0048</td>
<td>mg/l</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>48H EC50</td>
<td>0.005</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

**Hazardous ingredients:**

**HEXACHLOROBENZENE**

<table>
<thead>
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<th>Species</th>
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<td>mg/l</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

**Persistence and degradability:** Not biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** Bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** No data available.

**12.5. Results of PBT and vPvB assessment**

**Persistence (P-):**

**Persistence result:** not P-

**Bioaccumulation (B-):**

**Bioconcentration factor (BCF):** 22,000

**Aquatic species tested:** FISH

[cont...]
Bioaccumulation result: not B-

Toxicity (T-):
Carc. cat. 1/2, Muta. cat 1/2, Tera. cat. 1/2/3, R48 (see s.2): Yes
Toxicity result: T

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

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

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

14.1. UN number

UN number: UN2729

14.2. UN proper shipping name

Shipping name: HEXACHLOROBENZENE

14.3. Transport hazard class(es)

Transport class: 6.1

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes
Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.
Tunnel code: E
Transport category: 2

Section 15: Regulatory information

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

Specific regulations: Not applicable.

[cont...]
15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: 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:
H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

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.