

Version: 1.2

Date written/reviewed: 16th April 2019Date reviewed: 3rd February 2021**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING****Product Name** LudgerClean EC50 cartridges/ LudgerClean EC50 plate**Product Catalogue Name** LC-EC50-24, LC-EC50-96**CAS-No.** 7440-44-0**Company:** Ludger Ltd
Culham Science Centre
Abingdon
Oxfordshire
OX14 3EB**Telephone:** 01865 408554**Emergency Telephone:** 01865 408554**Email:** info@ludger.com**SECTION 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EU) No. 1272/2008 [EU-GHS/CLP]**

This product has been classed as a non-hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

The product does not require any labelling following EC directives or respective national laws.

Signal Word: None.

Hazard Statement(s)

None.

Precautionary Statement(s)

None.

2.3 Other hazard information:

None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances****Synonyms:** Carbon, Charcoal activated**Formula:** C**Molecular weight:** 12.01 g/mol

Component		Concentration
Name	Carbon	-
CAS-No.	7440-44-0	

EC-No. 231-153-3	
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SECTION 4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

General Advice

Consult a physician if exposure causes ill effects and if in any doubt. Show this safety data sheet to the physician/ first responder in attendance.

If Ingested

Rinse mouth well with water, if the person is conscious. Do not give anything by mouth if unconscious.

If the skin is exposed

Wash the affected area well with soap and water.

If eyes are exposed

Rinse eyes with water/ eye wash solution for at least 5 minutes as a precaution. If safe and easy to do so remove contact lenses and continue rinsing.

If inhaled

Move the affected person to a source of ventilation/ fresh air. If not breathing give artificial respiration.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

4.3 Indication of immediate medical attention and special treatment needed

No data available.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Select extinguishing media appropriate to the surrounding area, compatible media are water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for Firefighters

Wear self-contained breathing equipment, if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid the formation of dust and breathing it in. Wear PPE.

6.2 Environmental Precautions

None required.

6.3 Methods and material for containment and cleaning up

Use a damp cloth to sweep up the spilt product. Put the contaminated material and waste product into a suitable container with a lid and arrange disposal.

6.4 Reference to other sections

See Section 13 for more information on disposal.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Handle the product wearing PPE, when used as part of clean-up use under extraction, due to the nature of the chemicals used in the process, not the product itself.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, well-ventilated area. Keep sealed in a container until required preventing contamination.

7.3 Specific end uses

No data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Components with workplace control parameters**

This product contains no substances with occupational exposure limit values.

8.2 Exposure controls**Appropriate engineering controls**

Handle the product wearing Personal protective equipment, wash and dry hands before and after handling the product. General good laboratory and safety practice.

Personal Protective Equipment**Eye/face protection**

Wear eye protective equipment tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle the product wearing gloves. Gloves are to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Gloves must be checked for tears/holes before use and to be removed using the proper glove removal technique, so that the outer side of the gloves does not touch any skin. Gloves are to be disposed of as contaminated solid waste. See Section 13 for information on waste disposal.

Body Protection

Wear a laboratory coat or similar covering over the operator's outside clothing.

Respiratory protection

Respiratory protection is not required with this product (on its own), when used for cleaning up the chemicals used require that the product is handled under extraction.

Thermal hazards

None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance

Form: fine powder

Colour: black

Odour	Odourless
Odour threshold	None
pH	6.0 – 9 at 40g/l at 25°C
Freezing/Melting Point	Melting point/range: 3,550°C – lit.
Initial boiling point and boiling range	No data available
Flash Point	No data available
Evaporation rate	No data available
Flammability	No data available
Upper/lower flammability or explosive limits	No data available
Vapour Pressure	<0.01 hPa at 20°C
Vapour Density	No data available
Relative Density	0.250 – 0.600 g/cm ³
Solubility in water	Insoluble
Partition coefficient	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2 Other information

Bulk Density	250 – 550 kg/m ³ at 20°C
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SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

No data available.

10.2 Chemical stability

The product is stable at the correct storage conditions.

10.3 Possibility of Hazardous Reactions

No data available.

10.4 Conditions to Avoid

High moisture and extreme temperatures.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Other decomposition products.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

LD₅₀ Intravenous – Mouse – 440 mg/kg

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.

Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard.

No data available.

Potential Health Hazards**Inhalation**

May be harmful if inhaled. May irritate the respiratory tract.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through the skin. May irritate the skin.

Eyes

May cause eye irritation.

Signs and symptoms of exposure

To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: FF5250100

SECTION 12. ECOLOGICAL INFORMATION**12.1 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.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste Treatment Methods**

Dispose of by using a licensed professional chemical liquid and solid waste disposal company. To be incinerated.

Contaminated packaging

Dispose of packaging as solid contaminated waste.

SECTION 14. TRANSPORT INFORMATION**14.1 UN Number**

ADR/RID: -

IMDG: -

IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packing group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: -

IMDG: -

IATA: -

14.6 Special precautions for user

No data available

SECTION 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

No data available

Please note that the label elements that used to go in Section 15 are now in Section 2.

SECTION 16. OTHER INFORMATION

The advice offered is derived from the currently available information on the hazardous materials in this product and its component(s). Consideration has been made regarding the quantities offered in the pre-dispensed container. The advice offered is, therefore not all-inclusive nor should it be taken as the descriptive of the compound generally.