

1. Identification

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|--------------------------|---|
| Trade Name (as labeled): | Electrosect™ ILT Fluorescent Lamps |
| Manufacturer: | Brandenburg UK Limited 29 Navigation Drive, Hurst Business Park, Brierley Hill, West Midlands, DY5 1UT, United Kingdom |
| Emergency Contact: | +44 1384 472900 |
| Technical Assistance: | +44 1384 472900 |

2. Hazard Identification



Not applicable to intact lamp.

Warning!

Broken lamps may expose glass fragments, traces of mercury, and other components that may be harmful if inhaled, or may cause eye and respiratory tract irritation.

3. Composition – Information on Ingredients

There are no known health hazards from exposure to lamps that are intact.

| Component | % by Weight | CAS # | EC # | EC Classification |
|----------------------------------|-------------|-------------|-----------|--|
| Glass | > 90 | | | |
| Strontium borate, Europium doped | < 2 | 102110-29-2 | 301-028-8 | |
| Metals | < 2 | | | |
| Capping cement | < 2 | | | |
| Krypton | < 0.1 | 7439-90-9 | 231-098-5 | GHS04 H280 OSHA-H01 |
| Argon | < 0.1 | 7440-37-1 | 231-147-0 | GHS04 H280 OSHA-H01 |
| Tungsten | < 0.1 | 7440-33-7 | 231-134-9 | |
| Mercury | < 0.1 | 7439-97-6 | 231-106-7 | Repr. 1B H360D GHS06 H330 GHS08 H372 GHS09 H410 |

4. Emergency and First Aid Procedures

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| Skin | Apply normal first aid for glass cuts if such occur through glass breakage. |
| Ingestion | In the unlikely event of ingestion of a large quantity of material, seek medical attention. |
| Inhalation | If discomfort, irritation or symptoms of pulmonary involvement develop, remove from exposure and seek medical attention. |
| Eyes | Wash eyes, including under eyelids, immediately with copious amounts of water for 15 minutes. |
| Remarks - First Aid | None. |

5. Fire-Fighting Measures

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| Flammability | Non-Combustible. |
| Fire Extinguisher | Use extinguishing agents suitable for surrounding fire. |
| Hazardous Decomposition Products in Fire | Silicon dioxide, Aluminum oxides, Mercury oxides, Strontium oxide, Boric oxides, Europium oxides, Tungsten oxides, metal oxides. |

6. Accidental Release Measures

Not applicable to intact lamp.

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| Spillage Procedure | Not applicable if lamp is in original state. If lamp is broken: ventilate area where breakage occurred. Clear up using special mercury vacuum cleaner or other appropriate agent for preventing vaporization. Take standard measures for clearing up broken glass and deposit in a lockable container. |
| Emergency Procedure | Not applicable. |

7. Handling and Storage

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| Local Exhausting | Not applicable under normal circumstances. |
| Storage Conditions | No special precautions. |
| Storage Code | None. |

8. Exposure Controls/Personal Protection

| Exposure Limits: | | C = Ceiling - S = Skin | |
|---|---|-----------------------------------|---|
| Glass | | No MAC (STEL) has been laid down. | |
| Strontium borate, Europium doped | | No MAC (STEL) has been laid down. | |
| Metals | | No MAC (STEL) has been laid down. | |
| Capping cement | | No MAC (STEL) has been laid down. | |
| Krypton / Argon | | No MAC (STEL) has been laid down. | |
| Applicable to: Netherlands (20 °C : 1013 mbar) | | | |
| Tungsten | | TLV: | 5.8 mg/m ³ (as inhalable dust) |
| Mercury | | TLV: | 0.02 mg/m ³ (Women in the fertile age: consult the industrial safety officer) |
| Applicable to: Belgium (20 °C : 1013 mbar) | | | |
| Tungsten | | TLV: | 5.8 mg/m ³ |
| Tungsten | | STEL: | 10 mg/m ³ |
| Mercury | S | TLV: | 0.02 mg/m ³ (Women in the fertile age: consult the industrial safety officer) |
| Applicable to: Germany (20 °C : 1013 mbar) | | | |
| Tungsten | | STEL: | 5 mg/m ³ (as inhalable dust) |
| Mercury | S | TLV: | 0.1 mg/m ³ (Women in the fertile age: consult the industrial safety officer) |
| Applicable to: USA (25 °C : 1013 mbar) | | | |
| Tungsten | | TLV: | 5.8 mg/m ³ |
| Tungsten | | STEL: | 10 mg/m ³ |
| Mercury | S | TLV: | 0.025 mg/m ³ (Women in the fertile age: consult the industrial safety officer) |

| Instructions Regarding Broken Lamps (Applies Only to broken lamps): | |
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| Ventilation | Use both general and exhaust ventilation to maintain exposure levels below the Long or Short term limits. If such ventilation is not available, use respirators as specified below. |
| Respiratory Protection | European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use. |
| Eye Protection | The use of safety glasses, goggles or face shields is recommended for handling broken lamps, as described in European Standard EN 166. |
| Protective Clothing | Wear appropriate protective clothing to prevent skin exposure. |
| Hygiene | After handling broken lamps, wash thoroughly before eating, handling tobacco products, applying cosmetics, or using toilet facilities. |

9. Physical and Chemical Properties

Not Applicable for Lamps.

10. Stability and Reactivity

Not Applicable for Lamps.

11. Toxicological Information

There are no known health hazards from exposure to lamps that are intact.

No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

12. Ecological Information

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| Biological oxygen demand (5) | Not traceable. | | |
| Chemical oxygen demand | Not traceable. | | |
| Biological/chemical oxygen demand ratio | Not traceable. | | |
| Degradability | Not traceable. | | |
| Biochemical factor | >2500 Mercury | Source: | Supplier |
| Log Po/w | 4.5 Mercury | Source: | Chemicalcards |
| Henry Constant | Not traceable. | | |
| Ecotoxicity: | | | |
| Mercury | Fish | LC-50: 0.004 mg/l/96H | Source: Supplier |
| Mercury | Daphnia | EC-50: 0.0052 mg/l/48H | Source: Supplier |
| Mercury | Algae | IC-50: 0.3 mg/l/72H | Source: Supplier |
| Remarks on ecotoxicity: | None. | | |

13. Disposal Considerations

All fluorescent lamps contain some amount of mercury. All disposal options should be evaluated with respect to the requirements of the relevant local and national legislation.

Before disposing of waste lamps, check with the state, county, and/or local officials for current guidelines and regulations.

14. Transportation Information

| ADR/RID | |
|--------------------------|--|
| UN-Number | 2809 - Mercury in manufacturing articles |
| Class | 8 |
| Packing Group | III |
| Transport Emergency Card | 80GC9-III |
| IMO | |
| UN-Number | 2809 - Mercury in manufacturing articles |
| Class | 8 |
| Packing Group | III |
| Marine Pollutant | No |
| IATA/ICAO | |
| UN-Number | 2809 - Mercury in manufacturing articles |
| Class | 8 |
| Packing Group | III |

15. Regulatory Information

| | |
|------------------------|-----------------|
| EC-Label | Not Applicable. |
| Remarks on EC-Labeling | None. |

16. Other Information

This information is provided for health and safety assessments by an individual user.

Reference should be made to any relevant local or national health, safety, and environmental legislation.

This information does not constitute indication of suitability for specific uses.

Electrosect™ fluorescent lamps are exempted from the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are "articles".

This information is provided by Brandenburg UK Limited as a courtesy to its customers.

Electrosect™ is a trade mark of Brandenburg UK Limited.