

1. IDENTIFICATION OF THE SUBSTANCE/PREPURATION/MANUFACTURER

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| Supplier: | PestWest USA LLC 7135 16th Street E, Suite 124 Sarasota, FL 34243 |
| Telephone No: | Tel: 941 358 1983 |
| Tradename: | PestWest Quantum BL Lamps |
| General description: | Quantum BL (UVA) lamps for insect light traps, which attract flying insects. |
| Use: | Flying insect attraction. |
| Publication date: | 2/12/2018 |
| General information: | www.pestwest.com |
| Emergency phone number: | Tel: +49 (0)9131-7930 |

2. HAZARDS IDENTIFICATION

Not applicable to intact lamp. Lamp may crack or break if dropped or impact with horizontal or vertical surfaces.

3. COMPOSITION/INFORMATION ON INGREDIENTS

If a lamp is broken, the following materials may be released:

| Component | % by weight | CAS No. | EC No. | EC Classification |
|----------------------------------|-------------|-------------|-----------|---|
| Glass | >90 | | | |
| Strontium borate, europium-doped | <2 | 102110-29-2 | 310-028-8 | |
| Krypton | <0,1 | 7439-90-9 | 231-098-5 | R R99 |
| Argon | <0,1 | 7440-37-1 | 231-147-0 | R R99 |
| Mercury | <0,1 | 7439-97-6 | 231-106-7 | Repr. Cat.2 T+ R26 T R48/23 N R50/53 |
| Tungsten | <0,1 | 7440-33-7 | 231-143-9 | |
| Metals | <2 | | | |
| Capping cement | <2 | | | |

4. FIRST-AID MEASURES

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| Skin: | Apply normal first aid for glass cuts, if such occur through lamp breakage |
| Ingestion: | In the unlikely event of ingestion of a large quantity of material, seek medical attention. |
| Inhalation: | If discomfort, irritation, or pulmonary symptoms emerge, move away from exposure and seek medical attention. |
| Eyes: | Immediately rinse eyes (including under eyelids) with abundant amounts of water for 20 minutes. Seek medical attention. |
| Remarks for First Aid: | None |

5. FIRE-FIGHTING MEASURES

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| Fire-extinguisher: | Use extinguishing agents suitable for suppressing fire. |
| Hazardous decomposition products in fire: | silicon dioxide, aluminium oxides, mercury oxides, strontium oxide, boric oxides, europium oxides, metal oxide, tungsten oxides |

6. ACCIDENTAL RELEASE MEASURES

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| Spillage procedure: | Not applicable if lamp is in original state. If lamps are broken: ventilate area where breakage occurred. Clean-up using special Mercury vacuum cleaner or other appropriate agent for preventing vaporization. Use standard practices for cleaning-up broken glass and deposit in a locked container. |
| Emergency procedure: | No special precautions. |
| Storage code: | None |

7. HANDLING AND STORAGE

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| Local exhausting: | Under normal circumstances not applicable. |
| Storage conditions: | No special requirements. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure limits:

Applicable to: Netherlands (20 °C; 1013 mbar)

| | | | |
|----------------------------------|-------|---|---------------------------------|
| Glass | | | No MAC(STEL) has been laid down |
| Strontium borate, europium-doped | | | No MAC(STEL) has been laid down |
| Krypton/Argon | | | No MAC(STEL) has been laid down |
| Mercury | TLV: | 0.05 mg/m ³ (Women in the fertile age: consult the industrial hygienist) | |
| Mercury | STEL: | 0.5 mg/m ³ (Women in the fertile age: consult the industrial hygienist) | |
| Tungsten | | No MAC(STEL) has been laid down | |
| Metals | | No MAC(STEL) has been laid down | |
| Capping cement | | No MAC(STEL) has been laid down | |

Applicable to: Belgium (20 °C; 1013 mbar)

| | | | |
|---------|---|-------|--|
| Mercury | S | TLV: | 0.025 mg/m ³ S (Women in the fertile age: consult the industrial hygienist) |
| | | TLV: | 5 mg/m ³ |
| | | STEL: | 10 mg/m ³ |

Applicable to: Germany (20 °C; 1013 mbar)

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| Mercury | S | TLV: | 0.1 mg/m ³ (Women in the fertile age: consult the industrial hygienist) |
| Tungsten | | TLV: | 5 mg/m ³ (as inhalable dust) |

Applicable to: USA (25 °C; 1013 mbar)

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| Krypton/Argon | | | No MAC(STEL) has been laid down |
| Mercury | S | TLV: | 0.025 mg/m ³ (Women in the fertile age: consult the industrial hygienist) |
| Tungsten | | TLV: | 5 mg/m ³ |
| Tungsten | | STEL: | 10 mg/m ³ |
| C=Ceiling; S=Skin | | | |
| Remarks exposure limits | | None | |
| | | Not traceable | |

Advised personal protection:

| | |
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| Skin: | Not applicable |
| Eyes: | Not applicable |
| Inhalation: | Not applicable |

Instructions regarding broken lamps:

These instructions only apply to broken lamps.

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| Ventilation: | Use both general and local exhaust ventilation to maintain exposure levels below the long and short term limits. If such ventilation is not available use the 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, (described in European Standard EN 166). |
| Protective clothing: | Wear appropriate protective clothing to prevent skin exposure. |
| Hygiene: | After handling broken lamps wash hands thoroughly before eating, handling tobacco products, applying cosmetics or using toilet facilities. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| PHYSICAL STATE: | Article |
| COLOR: | Type dependent |
| ODOR: | Odorless |
| VAPOR RATE/RANGE: | Not applicable |
| BOILING POINT/RANGE: | Not traceable |
| MELTING POINT/RANGE: | > 480 °C |
| FLASH POINT/RANGE: | Not applicable |
| EXPLOSIVE LIMITS: | Not applicable |
| DUST EXPLOSIONS POSSIBLE IN AIR: | Not applicable |
| DENSITY: | Not traceable |
| VAPOR PRESSURE: | Not applicable |
| SOLUBILITY IN WATER: | Not applicable |
| SOLUBILITY IN FAT: | Not applicable |
| pH: | Not applicable |
| VISCOSITY: | Not applicable |
| AUTOIGNITION TEMPERATURE: | Not applicable |
| DECOMPOSITION TEMPERATURE: | Not traceable |
| ELECTROSTATIC CHARGE: | Not traceable |

10. STABILITY AND REACTIVITY

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| Product is stable under conditions described in section 7. | |
| Conditions to avoid: | None |
| Reactions with water: | No |
| Hazardous reactions: | None |
| Hazardous decomposition products at heating: | None |

11. TOXICOLOGICAL INFORMATION

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| Symptoms: | | |
| Skin: | Local | Not applicable |
| | General | Not applicable |
| Ingestion: | Local | Not applicable |
| | General | Not applicable |
| Inhalation: | Local | Not applicable |
| | General | Not applicable |
| Eyes: | Local | Not applicable |
| Remarks symptoms: | None | |
| Toxicity: | Not applicable | |
| Ames test: | Not applicable | |

12. ECOTOXICOLOGICAL INFORMATION

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|--|---------------|------------------------|---------------|
| Biological oxygen demand (5): | Not traceable | | |
| Chemical oxygen demand: | Not traceable | | |
| Biological/chemical oxygen demand ratio: | Not traceable | | |
| Degradoability: | 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 |
| Mercury: | Daphnia | EC-50: 0.0052 mg/l/48H | Source |
| Mercury: | Algae | IC-50: 0.3 mg/l/72H | Source |
| Remarks on ecotoxicity: | None | | |

13. DISPOSAL CONSIDERATIONS

All fluorescent lamps contain some amount of Mercury (Hg). Properly dispose of waste lamps according to all local, State, and Federal Laws.

14. TRANSPORT INFORMATION

| ADR/RID | | |
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| | UN-number | 2809 MERCURY IN MANUFACTURING ARTICLES |
| | Class | 8 |
| | Packing group | III |
| The product contains less than 1g of Mercury and box contains less than 30g of Mercury. Therefore goods are exempt from dangerous goods regulation, Subject to SP366. Not restricted Special Provision A69 section 1.2.11. | Transport emergency card 80GC9-III | 80GC9-III |
| IMO | | |
| | UN-number | 2809 MERCURY IN MANUFACTURING ARTICLES |
| | Class | 8 |
| | Packinggroup | III |
| | Marine pollutant | No |
| IATA/ICAO | | |
| | UN-number | 2809 MERCURY IN MANUFACTURING ARTICLES |
| | Class | 8 |
| The product contains less than 1g of Mercury and box contains less than 30g of Mercury. Therefore goods are exempt from dangerous goods regulation, Subject to SP366. Not restricted Special Provision A69 section 1.2.11. | Packing group | III |

15. REGULATORY INFORMATION

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|------------------------|----------------|
| EC-Label: | Not applicable |
| Remarks on EC-labeling | None |

16. OTHER INFORMATION

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| Remarks on SDS: | Working of this product may release toxic dust. Toxic Mercury vapors can be released if the lamp is broken. These lamps emit Ultraviolet Radiation (UV-A). Avoid prolonged exposure. For transport exemption consult applicable regulations. The product contains <= 10 mg Mercury. |
| SDS content data provided by: | Feilo Sylvania Germany GMBH |
| Inner company references: | None |
| Overview relevant R-sentences from all components in section 3. | |
| R26 | |
| R48/23 | |
| R50/53 | |
| R61 | |
| R99 | |
| Date last update: | 02/12/2018 |