

MATERIAL/PRODUCT SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (modified by Regulation (EU) No. 453/2010)

1. Identification of the substance/preparation/manufacture

MSDS	Blacklight lamps
Supplier	Havells Sylvania Germany GmbH Graf-Zeppelin-Straße 9-12 91056 Erlangen Germany
Tradename	PEST WEST BL Quantum
General description	LAMP
Use	Fly attracting
Publicationdate	09.02.2015
General information	www.havells-sylvania.com
Emergency phonenumber	+49 (0)9131-7930

2. Hazard identification

Not applicable to intact lamp. Lamp may crack when falling to the ground.

3. Composition/information on ingredients

If the lamps are 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	GHS04	H280 OSHA-H01
Argon	<0,1	7440-37-1	231-147-0	GHS04	H280 OSHA-H01
Mercury	<0,1	7439-97-6	231-106-7	Repr. 1B GHS06 GHS08 GHS09	H360D H330 H372 H410
Tungsten	<0,1	7440-33-7	231-143-9		
Metals	<2				
Capping cement	<2				

4. First-aid measures

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 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

Fire-extinguisher	Use extinguishing agents suitable for surrounding 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

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

7. Handling and storage

Local exhausting	Under normal circumstances not applicable
Storage conditions	No special precautions
Storage code	none

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 safety officer)
Mercury	STEL:	0.5 mg/m ³ (Women in the fertile age: consult the industrial safety officer)
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 safety officer)
Tungsten		TLV:	5 mg/m ³
Tungsten		STEL:	10 mg/m ³

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

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

applicable to: USA (25 °C; 1013 mbar)

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 safety officer)
Tungsten		TLV:	5 mg/m ³
Tungsten		STEL:	10 mg/m ³

C=Ceiling; S=Skin

Remarks exposure limits none**Odour threshold (20°C; 1013 mbar)** not traceable**Advised personal protection**

skin	not applicable
eyes	not applicable
inhalation	not applicable

Instructions regarding broken lamps

These instructions only apply to broken lamps

Ventilation	Use both general and local exhaust ventilation to maintain exposure levels below the Long or Short terms 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, 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	
Physical state	article
Colour	type dependent
Odour	odourless
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
Vapour 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	
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		
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 traceable
Ames test		not traceable

12. Ecotoxicological information				
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 state, country, and/or local officials for current guidelines and regulations.

14. Transport information**ADR/RID**

UN-number	3506 MERCURY IN MANUFACTURING ARTICLES
Class	8 (6.1)
Packinggroup	
Transport emergency card	80GC9-III

The product contains less than 1kg of Mercury and is therefore subject to SP366 and exempt from dangerous goods regulation.

IMO

UN-number	3506 MERCURY IN MANUFACTURING ARTICLES
Class	8 (6.1)
Packinggroup	
Marine pollutant	no

IATA/ICAO

UN-number	3506 MERCURY IN MANUFACTURING ARTICLES
Class	8 (6.1)
Packinggroup	

The product contains less than 1g of Mercury and box contains less than 30g of mercury therefore goods are exempt from dangerous goods regulation

15. Regulatory information

EC-Label	not applicable
Remarks on EC-labeling	none

16. Other information

Remarks on MSDS	Working of this product may release toxic dust. Toxic mercury vapours 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.
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Inner company references	none
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Overview relevant H-phrases from all components in section 3

H330	Fatal if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
H360D	May damage fertility or the unborn child
H280	If under pressure, may explode if heated
OSHA-H04	May displace oxygen and cause rapid suffocation

Date last update	09.02.2015
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The information provided in this Material/Product Safety Data Sheet is correct to the best of the knowledge, information and belief of Havells Sylvania Germany at the date of its printing.