

MATERIAL/PRODUCT SAFETY DATA SHEET

According EC 91/155

1. Identification of the substance/preparation/manufacture

MSDS	BL368 lamps
Supplier	Havells Sylvania Germany GmbH Graf-Zeppelin-Straße 9-12 91056 Erlangen Germany
Tradename	SYLVANIA BL 368 series
General description	LAMP
Use	Fly attracting
Publicationdate	19.01.2010
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	CAS No.	EC No.	EC Classification	
Glass				
Strontium borate, europium-doped	102110-29-2	310-028-8		
Krypton	7439-90-9	231-098-5	R	R99
Argon	7440-37-1	231-147-0	R	R99
Mercury	7439-97-6	231-106-7	Repr.Cat.2	R61
			T+	R26
			T	R48/23
			N	R50/53
Tungsten	7440-33-7	231-143-9		
Metals				
Capping cement				

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

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 chargement	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	2809 MERCURY IN MANUFACTURING ARTICLES
Class	8
Packinggroup	III
Transport emergency card	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
Packinggroup	III

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.
Inner company references	none
Overview relevant R-sentences from all components in section 3	
R26	Very toxic on inhalation.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.
R99	Suffocating in high concentrations.
Date last update	19.01.2010

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.