

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	% 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 R61 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

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	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	03.04.2014

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.