

MATERIAL/PRODUCT SAFETY DATA SHEET - According EC 91/155

The Netherlands, September 2019

Identification of the substance/preparation/manufacture

Section 1: MSDS BL368 UV-A lamps

Manufacturers name Astron - insect control lamps.: Astron UVTL-D type: 15, 18, 25 and 36 watt UV-A lamps
Astron UV PL-L type: 18 and 36 watt UV-A lamps. All lamp types in shatterproof and non-shatterproof execution.
van Dijklaan 17m 5581 WG Waalre, the Netherlands

Telephone number +31 (0)40 - 222 0492

E-Mail info@astron-uv.com

Section 2: Hazard identification

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

Section 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				

Section 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

Section 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

Section 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

Section 7: Handling and storage

Local exhausting Under normal circumstances not applicable

Storage conditions No special precautions

Storage code none

Section 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: 0.05 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: 0.05 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

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

Mercury	S	TLV: 0.05 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: 0.05 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

Remarks exposure limits none
Odour threshold (20°C; 1013 mbar) not traceable
C=Ceiling; S=Skin

Advised personal protection

skin not applicable
eyes not applicable
inhalation not applicable

Section 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 chagement not traceable

Section 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

Section 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

Section 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		

Section 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.

Section 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

Remarks ADR/RID This product is not subject to the transportation regulations of dangerous goods by road (ADR) based on special provision 599 (<1 kg mercury per article).

Remarks IMDG/IMO This product is not subject to the transportation regulations of dangerous goods by sea (IMDG) based on special provision 941 (<1 kg mercury per article).

Section 15: Regulatory information

EC-Label not applicable
Remarks on EC-labeling none

Section 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.