

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

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Indication of changes: §2.1 - §2.2 - §2.3 - §4.1 - §4.2 - §5.1 - §5.3 - §6.1 - §6.2 - §6.3 - §7.1 - §8.2 - §9.1 - §10.4 - §10.6 - §11.1 - §13.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.1 - §16.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **Product identifier**

Safety Data Sheet 28256

Product code 9280 248 01029

Product name: AST15WTL - EU Astron UV-A lamp 15W TL-D /

AST15WTL - EU Shatterproof Astron UV-A lamp 15W TL-D

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : No information available. Uses advised against : No information available

1.3. Details of the supplier of the safety data sheet

ASTRONUV Europe / Alcochem Hygiene Made for:

van Dijklaan 17m

5581 WG Waalre, The Netherlands

Tel: +31 (0)33 299 4139

Responsible for the compilation of

the SDS on behalf of the supplier/

manufacturer

info@astron-uv.com

1.4. **Emergency telephone number**

Emergency telephone number (regarding transport of DG): +31(0)33 299 4139

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]

This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

As an article, this product presents negligible health and physical hazards under reasonably anticipated Remarks on labelling

conditions of use. Accordingly, a Safety Data Sheet (SDS) is not required for this product under the standards cited above. This document is prepared as a courtesy to provide persons using this product with

additional safety and regulatory information.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition / information on ingredients

3.2. **Mixture**

CAS No.	EC No.	REACH No.	Concentration (%)	to Regu	cation according lation (EC) No 08 [CLP]	SCL / M-factor / ATE
GLASS						
65997-17-3	266-046-0	01-2119488048-29 01-2119990048-30				
MERCURY						
7439-97-6	231-106-7	01-2119548380-42		GHS06 GHS08 GHS09 H330 H360D H372 H400 H410	Acute Tox. 2 Repr. 1B STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	
TUNGSTEN						
7440-33-7	231-143-9	01-2119488910-30		GHS02 H228 H252	Flam. Sol. 1 Self-heat. 2	
METALS						
FILLING GAS						
				GHS04 H280	Press. gas - compressed	
FLUORESCE	NT POWDER					
CAPPING CE	MENT	!		i		
		enter and anotion 16				

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: No special measures are necessary. When in doubt or if symptoms are observed, get medical advice.

Following inhalation : No special measures are necessary.

Following skin contact : No special measures are necessary.

After eye contact : No special measures are necessary.

Following ingestion : No special measures are necessary.

Self-protection of the first aider : No special measures are necessary.

4.2. Most important symptoms and effects, both acute and delayed

Adverse human health effects and symptoms / Organs affected:

not applicable

Following inhalation : not applicable
Following skin contact : not applicable
After eye contact : not applicable
Following ingestion : not applicable

Further information: SECTION 11: Toxicological information

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated : Silicon dioxide (SiO2) - mercury oxides - metal oxide - tungsten oxides

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Flame-retardant protective clothing. (EN 469)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protection equipment. In case of fire: Evacuate area. Health hazard! Toxic mercury

vapors can be released if the lamp is broken.

6.1.1. For non-emergency personnel

Protective equipment : Do not breathe dust/fume/gas/mist/vapours/spray. Wear a self-contained breathing apparatus and

chemical protective clothing.

Emergency procedures : Health hazard! Evacuate area. Toxic mercury vapors can be released if the lamp is broken.

6.1.2. For emergency responders

Personal protection equipment : Do not breathed ust/fume/gas/mist/vapours/spray. Wear a self-contained breathing apparatus and

chemical protective clothing.

6.2. Environmental precautions

Collect spillage. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not allow to enter into soil/subsoil. Ensure waste is collected and contained.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

Spillage procedure not applicable, if lamp is in original state. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves.

6.3.2. For cleaning up

Be thorough in collecting broken glass. Put the broken lamp parts in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner unless it is a special mercury vacuum cleaner to prevent any vaporisation of the mercury. Mercury droplets can be grabbed with an acid etched zinc plate and then shaken off into a collection vessel (work over a safety vessel). For reuse store the zinc plate in an area that is under permanent exhaustion or dispose it together with the mercury remains. Ventilate affected area.

6.3.3. Other information

Inform the relevant authorities if the product has entered sewers, waterways, soil or air and might have caused environmental pollution.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling : Handle with care - avoid bumps, friction and impact. Toxic mercury vapors can be

released if the lamp is broken.

Measures to prevent fire : Handle with care - avoid bumps, friction and impact. Keep away from sources of heat

(e.g. hot surfaces), sparks and open flames.

Measures to prevent aerosol and dust generation : Do not vacuum. Vacuuming could spread mercury-containing powder or mercury

арог.

Environmental precautions : Avoid release to the environment.

Advices on general occupational hygiene : When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands

before breaks and after work.

Further information: No information available.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Special precautions for user: none.

 storage temperature
 : No information available.

 Requirements for storage rooms and vessels
 : No information available.

Storage class : CT3

Materials to avoid : No information available.

Further information on storage conditions : No information available.

7.3. Specific end use(s)

Recommendation : not applicable

Industrial sector specific solutions : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

		European Union		The Netherlands		Germany		France		
Substance name	Limit value	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	
					S			(Vapour)		Н
MERCURY	8 hour(s)	0.02		0.02		0.02		0.02		
WERCORT	15 minutes					0.16				
	С									

		А	ustria	Ве	elgium	Switz	zerland	C	nina
Substance name	Limit value	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm
			Н		Н	(Vapour)		(Vapour)	Н
MERCURY	8 hour(s)	0.02		0.02		0.05		0.02	
WERCURY	15 minutes	0.08				0.4		0.04	
	С								
		(inhalabl	e dust)			(inhalable	dust)		
TUNGSTEN	8 hour(s)	5				5		5	
	15 minutes	10						10	
	С								

		S	Spain		United Kingdom		Italy		Norway	
Substance name	Limit value	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	
			•				Н			
MERCURY	8 hour(s)	0.02		0.02		0.02		0.02		
	15 minutes			0.06				0.06		
	С									
TUNGSTEN	8 hour(s)	5		5				5		
	15 minutes	10		10		{·······		10		
	С									

		Po	land	Po	rtugal	R	ussia	Sw	eden
Substance name	Limit value	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm
		(Vapour)	Н		H	(Vapour)			
MERCURY	8 hour(s)	0.02		0.02		0.05		0.02	
	15 minutes					0.01			
	С								
		(inhalable	dust)					(dust, tota	l)
TUNGSTEN	8 hour(s)	5		5		6		5	
	15 minutes			10					
	С								

Source

: SUVA, Dutch Health Council, 2006/15/EC, 2004/37/EC, LOLI DB, 2000/39/EC, GWBB/VLEP, Gestis, 91/322/EEC, 2017/164/EU, INRS (Fr), TRGS 905, TRGS 910, Austrian OEL Regulation, Dutch Social-Economic Council (SER), US OSHA, EU OSHA, TRGS 900, ACGIH®, 2009/161/EU

 $20~^\circ\text{C}$, 1013 mbar: European Union / China / South Korea $25~^\circ\text{C}$, 1013 mbar: United States / Canada / Japan

[x]: appraisal period x minutes

C: peak limitation

H: skin resorptive

S: Statutory threshold limit value

ALARA: As low as reasonably achievable (ALARA principle).

Remark Occupational exposure limit values

none

DNEL (Derived No Effect Level (DNEL-value))

			DNEL worker					
		sys	temic	lo	cal			
Substance name	Exposure route	long-term	short-term	long-term	short-term			
	oral [mg/kg bw/day]		Not re	quired.				
MERCURY	Inhalation [mg/m³] 00	0.02						
	dermal [mg/kg bw/day]							
	oral [mg/kg bw/day]	Not required.						
TUNGSTEN	Inhalation [mg/m³] 10	5.8						
	dermal [mg/kg bw/day]	1.7						

PNEC (Predicted No Effect Concentration (PNEC-value))

Substance name	aquatic, freshwater [mg/L]	aquatic, marine water [mg/L]	aquatic, intermittent release [mg/L]	sewage treatment plant [mg/L]	sediment, freshwater [mg/kg sediment dw]	sediment, marine water [mg/kg sediment dw]	soil [mg/kg soil dw]
MERCURY	0.000057	0.000067		0.00225	9.3	9.3	0.022
TUNGSTEN	0.338	0.0338	0.31	0.00586	960	96	2.17

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Safe handling: see section 7

8.2.2. Personal protection equipment

Eye/face protection: Eye protection: not required.

Skin protection

Hand protection : Hand protection is not required.Body protection: not required.

Respiratory protection: Usually no personal respirative protection necessary.

8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solidAppearance: LampsColour: variousOdour: odourless

Odour threshold : No information available.
pH : not applicable

Melting point/freezing point: No information available.Initial boiling point and boiling range: No information available.Flash point: No information available.

Evaporation rate : not applicable

flammability : This product contains: Flammable solids.

Upper/lower flammability or explosive limits

Upper explosion limit
Lower explosion limit
Vapour pressure
Vapour density
Relative density

: not applicable
: not applicable
: not applicable
: No information available.
: No information available.

Solubility(ies)

Water : not applicable

Partition coefficient n-octanol/water : No information available.

Auto-ignition temperature : not applicable

Decomposition temperature : No information available.

Viscosity: not applicableExplosive properties:: not applicableOxidising properties: not applicable

9.2. Other information

Critical temperature Tc : not applicable Fat solubility : not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Strong mechanical impact.

10.5. Incompatible materials

none

10.6. Hazardous decomposition products

No known hazardous decomposition products. - Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Following ingestion : No Skin contact : No Inhalation : No

Substances	Dose / Concentration	Value	Species	Exposure time	Method			
MERCURY								
Inhalation (vapour)	LC50:	>0.053 mg/L	Rat	4 hour(s)				
TUNGSTEN								
oral	LD50:	>2000 mg/kg	Rat		OECD 401			
dermal	LD50:	>2000 mg/kg	Rat		OECD 402			
Inhalation (dust/mist)	LC50:	>5.4 mg/L	Rat	4 hour(s)	OECD 403			

Skin corrosion/irritation : not applicable Serious eye damage/eye irritation : not applicable Respiratory or skin sensitisation : not applicable Germ cell mutagenicity : not applicable Carcinogenicity : not applicable Reproductive toxicity : not applicable STOT-single exposure : not applicable STOT-repeated exposure : not applicable **Aspiration hazard** : not applicable

Symptoms

Following inhalation : not applicable
Following skin contact : not applicable
After eye contact : not applicable
Following ingestion : not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

11.2.2. Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Substance name	Acute (short-term) fish toxicity	Acute (short-term) toxicity to crustacea	Acute (short-term) toxicity to algae and cyanobacteria	Toxicity to other aquatic plants/organisms
MERCURY	LC50: >0.16 mg/L 96 hour(s) Fish - Source: US-EPA			
TUNGSTEN	LC50: >181 mg/L 96 hour(s) Fish - Source: ECHA - Method: OECD 203	EC50: >163 mg/L 48 hour(s) Daphnia - Source: ECHA - Method: OECD 202		

12.2. Persistence and degradability

Biodegradation : No information available.

Chemical oyxgen demand (COD) : No information available.

Biochemical oxygen demand : No information available.

BOD5/COD ratio : No information available.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Bioconcentration factor (BCF) : No information available.

Partition coefficient n-octanol/water : No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

12.8. Additional ecotoxicological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Waste should not be disposed of by release to water, drainage, sewer, or the ground. Put the broken lamp parts in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner unless it is a special mercury vacuum cleaner to prevent any vaporisation of the mercury. Disposal should be in accordance with applicable regional, national and local laws and regulations. See section: 6.3.1 and 6.3.2.

Other disposal recommendations : not applicable

SECTION 14: Transport information

14.1. UN number or ID number

UN 3506

14.2. UN proper shipping name

MERCURY CONTAINED IN MANUFACTURED ARTICLES

14.3. Transport hazard class(es)

8 (6.1)

14.4. Packing group

none

14.5. Environmental hazards

Marine pollutant: No

14.6. Special precautions for user

Hazard identification number (Kemler No.): none

EmS (IMDG): F-A, S-B

14.7. Maritime transport in bulk according to IMO instruments

No information available.

14.8.

ADR / RID The product is not subject to the transportation regulations of dangerous goods based on special provision: 366 (< 1 kg

mercury (Hg).)

IMDG The product is not subject to the transportation regulations of dangerous goods based on special provision: 366 (< 1 kg

mercury (Hg).)

ICAO-TI / IATA-DGR For transport exemptions consult special provision: A48, A69, A191

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International regulations:

Minamata Convention on Mercury : MERCURY

EU legislation

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

MERCURY : H2, E1

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH:

not applicable

Overall Assessment on CMR properties

according to Regulation (EC) No. 1907/2006 (REACH): not applicable

Regulation (EC) No 850/2004 [POP-Regulation]

not applicable

Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer.

not applicable

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Additional information

Lamps emit Ultraviolet Radiation (UV). Avoid prolonged exposure.

This product contains : 5.0 mg mercury (Hg).

Relevant H-phrases (Number and full text)

H228 Flammable solid.

H252 Self-heating in large quantities; may catch fire.
H280 Contains gas under pressure; may explode if heated.

H330 Fatal if inhaled.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ACGIH® American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route

AICS Australian Inventory of Chemical Substances

BuAc n-Butyl acetate

CAS Chemical Abstracts Service

CCID New Zealand Chemical Classification and Information Database

DSL Canada Domestic Substances List ECHA-RAC ECHA Committee for Risk Assessment EFSA European Food Safety Authority

EHSP OECD Environment, Health, and Safety Publication

EmS Emergency Schedule

EU-CLH European Union Harmonised Classification and Labelling

GESTIS Databases on hazardous substances of the German Social Accident Insurance
GHS Globally Harmonised System of Classification and Labelling of Chemicals

GWBB-VLEP Grenswaarden voor beroepsmatige blootstelling/Valeurs limites d'exposition professionnelle

HHS U.S. Department of Health and Human Services

HSDB Hazardous Substances Data Bank

IARC International Agency for Research on Cancer
IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

INRS French National Research and Safety Institute for the Prevention of Occupational Accidents and Diseases

JP-GHS Japan GHS Basis for Classification Data

KHC Known human carcinogens.

LEL Lower explosion limit

LOLI (List of Lists) Database

n.a. not applicable

NDSL Canada Non-domestic Substance List

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme
NIER South Korea National Institute of Environmental Research Evaluations

NLM United States National Library of Medicine

NTP National Toxicology Program
NZIoC New Zealand Inventory of Chemicals

OECD Organisation for Economic Co-operation and Development

OSHA Occupational Safety & Health Administration

OUE European Odour Unit

RAHC Reasonably Anticipated Human Carcinogen

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

SCOEL Scientific Committee on Occupational Exposure Limits (EU)

SIDS OECD Screening Information Data Sets
SUVA Swiss Accident Insurance Fund
TRGS Technische Regeln für Gefahrstoffe

TSCA The Toxic Substances Control Act Chemical Substance Inventory

TWA Time Weighted Average
UEL Upper explosion limit
UN United Nations

US-EPA United States Environmental Protection Agency

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