SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision date : 2019-01-25

Publication date : 2018-08-28 **Version number :** 1.2

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

(a) Product identifier

SDS : 33612

Lamp Material Data Sheet code (LMDS) : Philips TL5-09100D

* **Supplier** :

Signify North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873-4186

Tradename : PHILIPS T5 FLUORESCENT LAMPS - ALL TYPES

(b) Other means of identification : All ALTO, non-ALTO, Standard, HE, HO, Circular, and TuffGuard All lengths, coatings, wattages

(c) Relevant identified uses of the substance or mixture and uses advised against

General description : Fluorescent Lamp

Use : Various

Uses advised against : No data available

(d) Details of the supplier of the safety data sheet

Supplier safety data sheet : Philips Electronics Nederland B.V., Philips Environment & Safety, High Tech Campus 37, 5656 AE Eindhoven, Tel. +31 (0)40 27 41 645

Responsible department : hazcom@philips.com

(e) Emergency telephone number Emergency telephone number:

CHEMTREC : +1 (0)800-424-9300

SECTION 2: Hazards identification

(a) Classification of the substance or mixture

C lassification in accordance with 29 CFR 1910.1200

Not classified.

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article and as such does not require an SDS per the OSHA hazard communication standard.

(b) Label elements

Labelling in accordance with 29 CFR 1910.1200

Label : not applicable.

Remarks on labelling: none

(c) Other hazards

none.

SECTION 3: Composition/information on ingredients

T5 Fluorescent Lamps - Linear					
Description	Chemical name	CAS #'s	Total Weight (g)		% of Weight
Phosphor Components					
	Yttrium oxide (Y2O3), europium-doped - (YOX)	68585-82-0	0.7		1.09%
	Lanthanum Phosphate Phosphor - (LAP)	95823-34-0	0.375		0.59%
	Aluminum oxide (Al2O3), solid soln. with barium oxide and magnesium oxide, europium-doped - BAM/BBG/BamGreen	102110-17-8	0.175		0.28%
	Aluminum oxide (Al2O3), solid soln. with cerium oxide (CeO2) and magnesium oxide, terbium-doped - (CAT)	102110-19-0	0.1		0.05%
Individual or mixed components			**1.35**	**g**	**2.01%**
Glass Bulb Pre-Coat	aluminium oxide	1344-28-1	**0.014 - 0.05**	**g**	**0.04%-0.06%**
Glass, oxide, chemicals	Glass Bullbs	65997-17-3	**35-100**	**g**	**97%-99%**
Mercury	Mercury	7439-97-6	**0.0014 - 0.0064**	**g**	**0.004%-0.006%**

SECTION 4: First aid measures

(a) Description of first aid measures

Skin : Not applicable. **Ingestion :** Not applicable. **Inhalation :** Not applicable. **Eyes :** Not applicable.

(b) Most important symptoms and effects, both acute and delayed

Skin	local	:	Under normal circumstances not applicable.
	general	:	Under normal circumstances not applicable
Ingestion	local	:	Under normal circumstances not applicable
	general	:	Under normal circumstances not applicable
Inhalation	local	:	Under normal circumstances not applicable
	general	:	Under normal circumstances not applicable
Eyes	local	:	Under normal circumstances not applicable
Remarks symptoms		:	None

(c) Indication of any immediate medical attention and special treatment needed None

SECTION 5: Firefighting measures

(a) Extinguishing media

Suitable fire-extinguisher

determined by surrounding.

Unsuitable fire-extinguisher

not traceable.

(b) Special hazards arising from the substance or mixture

Hazardous decomposition products in fire **:** Silicon dioxide, Mercury oxides, metal oxide

(c) Advice for firefighters

In the event of fire, wear protective clothing and use breathing apparatus that is independent of the ambient air.

SECTION 6: Accidental release measures

(a) Personal precautions, protective equipment and emergency procedures

Personal precautions

In case of broken articles, use protective equipment. Evacuate area.

For non-emergency personnel

Protective equipment

Wear protective gloves/protective clothing/eye protection/face protection.

Emergency procedure

Ventilate affected area.

For emergency responders

Use appropriate respiratory protection. Personal protection equipment

(b) Methods and material for containment and cleaning up

For containment

Collect materials needed to clean up broken bulb: stiff paper or cardboard; sticky tape; damp paper towels or disposable wet wipes (for hard surfaces); and a glass jar with a metal lid or a sealable plastic bag. Be thorough in collecting broken glass.

For cleaning up

DO NOT VACUUM. Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor. Scoop up glass fragments using stiff paper or cardboard and sticky tape. Place cleanup materials in a sealable container.

Other information

No information available.

SECTION 7: Handling and storage

(a) Precautions for safe handling

Local exhausting **:** Under normal circumstances not applicable.

(b) Conditions for safe storage, including any incompatibilities

Storage conditions **:** No special precautions.

SECTION 8: Exposure controls/personal protection

(a) Control parameters

Exposure limits :

applicable to: United States of America (25 ºC; 1013 mbar)

TWA(8 hours):	0.025 mg/m3	S	MERCURY- [according to ACGIH]
TWA (8 hours):	0.1 mg/m3	C	MERCURY- [according to NIOSH]
TWA (8 hours)	0.1 mg/10m^3	C	MERCURY – [according to OSHA]

C=Ceiling; S=Skin

Remarks exposure limits : none

(b) Appropriate engineering controls: Under normal circumstances not applicable

(c) Exposure controls

Advised personal protection:

Hands: Under normal circumstances not applicable. Breakthrough time: Under normal circumstances not applicable. Eyes: Under normal circumstances not applicable. Inhalation: Under normal circumstances not applicable. Skin: Under normal circumstances not applicable.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	:	article
Color	:	type dependent
Odor	:	odorless
Odor threshold (20ºC; 1013 mbar)	:	not traceable
pH	:	not applicable
Melting point/freezing point	:	not traceable
Boiling point/range	:	not traceable
Flash point/range	:	not applicable
Evaporation rate/range	:	not applicable
Vapor rate/range	:	not applicable
Flammability (solid, gas)	:	data not available
Upper/lower flammability or explosive limit	:	not applicable
Vapor pressure	:	not applicable
Vapor density	:	not applicable
Density	:	not traceable
Solubility in water	:	not applicable

Log Po/w:	4.5	MERCURY	**Source**	:	Chemicalcards
	0.54	POLY(ETHYLENE TEREPHTHALATE)	**Source**	:	Easi View

Auto-ignition temperature	: not applicable
Decomposition temperature	: not traceable
Viscosity	: not applicable
Dust explosions possible in air	: not applicable
Oxidizing properties	: no

SECTION 10: Stability and reactivity

(a) Reactivity

Not applicable.

(b) Chemical stability

The substance or mixture is stable under normal conditions.

(c) Possibility of hazardous reactions

Reactions with water	**:**	no
Other hazardous conditions	**:**	Data not available.

(d) Conditions to avoid

Data not available.

(e) Incompatible materials

Hazardous reactions with	**:**	none

(f) Hazardous decomposition products

Hazardous decomposition products at heating	**:**	none

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity
No data available.

Acute dermal toxicity
No data available.

Acute inhalation toxicity
No data available.

Skin corrosion/irritation
The substance or mixture is not classified for skin corrosion/-irritation.

Serious eye damage/irritation
The substance or mixture is not classified for serious eye damage/irritation.

Respiratory or skin sensitization
The substance or mixture is not classified for respiratory or skin sensitization.

Germ cell mutagenicity
The substance or mixture is not classified for germ cell mutagenicity.

Carcinogenicity

IARC: Group 3: Not classifiable as to its carcinogenicity to humans (Mercury)
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
The substance or mixture is not classified for reproductive toxicity.

Specific target organ toxicity-single exposure
The substance or mixture is not classified for specific target organ toxicity-single exposure.

Specific target organ toxicity-repeated exposure
The substance or mixture is not classified for specific target organ toxicity-repeated exposure.

Aspiration hazard
The substance or mixture is not classified for aspiration hazard.

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

SECTION 12: Ecological information

(a) Toxicity

Ecotoxicity

LC-50: 0.004 mg/l/96H (Fish)	MERCURY	**Source** **:** Easi View
EC-50: 0.0205 mg/l/48H (Daphnia)	MERCURY	**Source** **:** IFA- Gestis
IC-50: 0.3 mg/l/72H (Algae)	MERCURY	**Source** **:** Easi View

(b) Persistence and degradability

Biological oxygen demand:	not applicable
Chemical oxygen demand:	not applicable
Degradability:	not applicable

(c) Bioaccumulative potential

Bioconcentration factor (BCF) **:** >2500 MERCURY

(d) Mobility in soil

Henry Constant	**:** 1.46E-1 atm m3/mol	POLY(ETHYLENE TEREPHTHALATE)	**Source:** Easi View

(e) Other adverse effects

Remarks on eco-toxicity**:** none

SECTION 13: Disposal considerations

Waste treatment methods

Remainder material or uncleaned empty packaging's have to be incinerated in a proper installation or dumped on an approved landfill, in accordance with local and national legislation.

SECTION 14: Transport information

(a) UN number

DOT/49CFR	: none
IMDG/IMO	: none
IATA/ICAO	: 3506
Remarks IATA/ICAO	: For transport exemptions consult IATA special provisions A48, A69 and A191.

(b) UN proper shipping name

DOT/49CFR	: none
IMDG/IMO	: none
IATA/ICAO	: MERCURY CONTAINED IN MANUFACTURED ARTICLES

(c) Transport hazard class(es)

DOT/49CFR : none IMDG/IMO : none IATA/ICAO : 8 (6.1)

(d) Packing group

DOT/49CFR : none IMDG/IMO : none IATA/ICAO : none

(e) Environmental hazards

Marine pollutant : no

(f) Special precautions for user

Hazard identification number (ADR/RID) : none

EmS (IMDG/IMO) : none

(g) Transport in bulk according to Annex II of Marpol and the IBC Code Data not available.

SECTION 15: Regulatory information

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

US Federal regulations

SARA 313: Mercury **SARA 311/312**: not applicable.
HMIS Classification: not applicable.
U.S. Clean Water Act Section 307 – Toxic Pollutants: Mercury

National inventories

Articles are exempted from the Toxic Substances Control Act Inventory (TSCA-USA).

International inventories

DSL/NDSL: This substance is on the DSL (Mercury)

SECTION 16: Other information

Remarks on SDS **:** Working on this product may release toxic dust.
Toxic mercury vapors can be released if the lamp is broken.
For transport exemptions consult applicable regulations.

A key or legend to abbreviations and acronyms used in the safety data sheet

GHS	Globally Harmonized System of Classification and Labelling of Chemicals
CAS	Chemical Abstracts Service
TGG = TWA	Time Weighted Average
LEL	Lower Explosive Limit
UEL	Upper Explosive Limit
NTP	National Toxicology Program
KHC	Known Human Carcinogen
RAHC	Reasonably Anticipated Human Carcinogen
IARC	International Agency for Research on Cancer
OSHA	Occupational Safety & Health Administration
DOT	US Department of Transportation
RID	Règlement concernant le transport international ferroviaire des marchandises dangereuses
UN	United Nations

IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
EmS	Emergency Schedule
SARA	Superfund Amendments and Reauthorization Act

* Point to alterations with regard to the previous version.