Date last verification : 2013-01-11 Version number : 4.0

Revision date : 2013-01-11 Publication date : 2012-04-23

Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

MSDS : 27789

Product code 12nc : 9279 023 21101

Supplier : PHILIPS LIGHTING, POLAND, PILA

Kossaka 150 64-920 Pila Poland

Tradename : SYNERGETIC PL-S 11W/11/2P 1CT/6X10BOX

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

General description : BLUE LIGHT THERAPY

Use : Various

Uses advised against : Data not available.

1.3. Details of the supplier of the safety data sheet

Supplier safety data sheet : Philips Electronics Nederland B.V., P.O. Box 218, 5600 MD Eindhoven, Tel. +31 (0)40 2747588

Responsible department : dangerous.goods@philips.com

1.4. Emergency telephone number

Emergency telephone number : +31 (0)497-598315

2. Hazards identification

2.1. Classification of the substance or mixture

GHS: (EC) No 1272/2008

Not classified according to GHS classification.

EC: (EC) No 67/548 or 1999/45

Not classified according to EC classification.

2.2. Label elements

GHS: (EC) No 1272/2008

GHS-Label: not applicable

Remarks on GHS-labelling none

EC: (EC) No 67/548 or 1999/45

EC-Label: not applicable

Remarks on EC-labelling none

2.3. Other hazards

Data not available.

3. Composition/information on ingredients

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Component		pelsis	— Percentage(%)	GHS-Label EC-Label
GLASS	65997-17-3 266-046-0	01-2119990048-30		
FLUORESCENT POWDER		_·_	_	
FILLING GAS			_	GHS04 H280 Press. gas - compressed EUHP99 Asphixiant R: 99
MERCURY	7439-97-6 231-106-7	080-001-00-0 01-2119548380-42		GHS06 GHS08 GHS09 H330 Acute tox. 2 H360D Repr. 1B H372 STOT RE 1 H400 Aquatic acute 1 H410 Aquatic chronic 1 T+,N;R: 61 26 48/23 50/53 Repr.Cat. 2
TUNGSTEN	7440-33-7 231-143-9	01-2119488910-30	_	
METALS			_	
CAPPING CEMENT				

For the full text of the H-sentences, hazard statements and R-sentences mentioned in this section, see section 16.

4. First aid measures

4.1. Description of first aid measures

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

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

Skin local Not applicable. general Not applicable. Ingestion local Not applicable. Not applicable. general Not applicable. Inhalation local general Not applicable. Eyes local Not applicable. Remarks symptoms None

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

None

5. Firefighting measures

5.1. Extinguishing media

Suitable fire-extinguisher

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Unsuitable fire-extinguisher

not traceable



5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in fire : silicon dioxide, mercury oxides, metal oxide, tungsten oxides

5.3. Advice for firefighters

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Precautions

Use protective equipment. See section 8.

Emergency procedure

Is not to be expected.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Spillage procedure

Not applicable if lamp is in original state. If lamp is broken: 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.

6.4. Reference to other sections

See section 8 for appropriate personal protection.

See section 13 for additional information on waste treatment.

Handling and storage

7.1. Precautions for safe handling

Observe label precautions.

Local exhausting: Under normal circumstances not applicable.

Storage code (on behalf of PGS : CT3

15)

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : No special precautions.

7.3. Specific end use(s)

Data not available.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits:

applicable to: The Netherlands (20 °C; 1013 mbar)

No TWA has been laid down. GLASS

No TWA has been laid down. FLUORESCENT POWDER

No TWA has been laid down. FILLING GAS TWA(8 hours): 0.02 mg/m3 MERCURY

No TWA has been laid down.

TUNGSTEN
No TWA has been laid down.

METALS

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(Statutory threshold limit value)

No TWA has been laid down.

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

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

TWA(8 hours): 0.1 mg/m3 S MERCURY(Women in the fertile age: consult the industrial

safety officer.)

pelsis

TWA(8 hours): 5 mg/m3 TUNGSTEN(as inhalable dust)

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

TWA(8 hours): 0.025 mg/m3 S MERCURY(Women in the fertile age: consult the industrial

safety officer.)

TWA(8 hours): 5 mg/m3 TUNGSTEN TWA(15 minutes): 10 mg/m3 TUNGSTEN

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

TWA(8 hours): 5 mg/m3 TUNGSTEN(as dust)

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

TWA(8 hours): 0.05 mg/m3 MERCURY(fume)
TWA(15 minutes): 0.4 mg/m3 MERCURY(fume)

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

 TWA(8 hours):
 0.02 mg/m3
 S
 MERCURY

 TWA(15 minutes):
 0.04 mg/m3
 S
 MERCURY

 TWA(8 hours):
 5 mg/m3
 TUNGSTEN

 TWA(15 minutes):
 10 mg/m3
 TUNGSTEN

applicable to: European Union (20 °C; 1013 mbar)

TWA(8 hours): 0.02 mg/m3 MERCURY

C=Ceiling; S=Skin

Remarks exposure limits:

none

Solubility in water

DNEL (Derived No Effect Level)

Data not available.

PNEC (Predicted No Effect Concentration)

Data not available.

8.2. Exposure controls

Advised personal protection:

Hands : not applicable
Breakthrough time : not applicable
Eyes : not applicable
Inhalation : not applicable

Skin : none (when used normally)

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : article Colour : type dependent Odour : odourless Odour threshold (20°C; 1013 mbar) : not traceable : not applicable pН Melting point/range : >480 °C Boiling point/range : not traceable Flash point/range : not applicable : not applicable Vapor rate/range Flammability (solid, gas) data not available **Explosive limits** not applicable Vapour pressure not applicable Density : not traceable

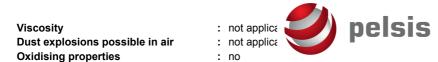
Log Po/w : 4.5 MERCURY Source : Chemicalcards

: not applicable

Autoignition temperature : not applicable

Decomposition temperature : not traceable

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9.2. Other information

Solubility in fat : not applicable Electrostatic chargement : not traceable

10. Stability and reactivity

10.1. Reactivity

See section 10.2 - 10.6.

10.2. Chemical stability

The substance or mixture is stable under normal conditions. See also section 10.4.

10.3. Possibility of hazardous reactions

Reactions with water : no

Other hazardous conditions : Data not available.

10.4. Conditions to avoid

Data not available

10.5. Incompatible materials

Hazardous reactions with : none

10.6. Hazardous decomposition products

Hazardous decomposition products at heating : none

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

LD-50: >2.0 g/kg (ORL-RAT) TUNGSTEN **Method** : OECD 401

Source : Supplier

Acute dermal toxicity

LD-50: >2.0 g/kg (SKN-RAT) TUNGSTEN Method : OECD 402

Source : Supplier

Acute inhalation toxicity

LC-50: >5.4 mg/l/4H (IHL-RAT) TUNGSTEN **Method** : OECD 403

Source : Supplier

Ames test

not traceable

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 sensitisation

The substance or mixture is not classified for respiratory or skin sensitisation.

Germ cell mutagenicity

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

Carcinogenicity

The substance or mixture is not classified for carcinogenicity.

Reproductive toxicity

The substance or mixture is not classified for reproductive toxicity.

Specific target organ toxicity-single exposure

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The substance or mixture is not classified for specific ta

Specific target organ toxicity-repeated exposure



The substance or mixture is not classified for specific ta. go. o.go. comon, repeated onpodure.

Aspiration hazard

The substance or mixture is not classified for aspiration hazard.

Symptoms

Skin local Not applicable. general Not applicable. Not applicable. Ingestion local Not applicable. general Inhalation local Not applicable. Not applicable. general Not applicable. Eyes local

Remarks symptoms : None

12. Ecological information

12.1. Toxicity

Ecotoxicity

 LC-50: 0.004 mg/l/96H (Fish)
 MERCURY
 Source
 : Easi View

 EC-50: 0.0052 mg/l/48H (Daphnia)
 MERCURY
 Source
 : ChemDat (Merck)

 IC-50: 0.3 mg/l/72H (Algae)
 MERCURY
 Source
 : Easi View

12.2. Persistence and degradability

Biological oxygen demand : not traceable
Chemical oxygen demand : not traceable
Biological/chemical oxygen : not traceable

demand ratio

Degradability : not traceable

12.3. Bioaccumulative potential

Biochemical factor: >2500MERCURYSource: SupplierLog Po/w: 4.5MERCURYSource: Chemical cards

12.4. Mobility in soil

Henry Constant : not traceable

12.5. Results of PBT and vPvB assessment

Data not available.

12.6. Other adverse effects

Remarks on ecotoxicity : none

13. Disposal considerations

13.1. Waste treatment methods

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

14. Transport information

14.1. UN number

ADR/RID : 3506 IMDG/IMO : 3506 IATA/ICAO : 3506

Remarks ADR/RID : This product is not subject to the transportation regulations of dangerous goods by road (ADR) based

on special provision 366 (<1 kg mercury per article).

Remarks IMDG/IMO : This product is not subject to the transportation regulations of dangerous goods by sea (IMDG) based

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14.2. UN proper shipping name

ADR/RID : MERCURY CONTAINED IN MANUFACTURED ARTICLES
IMDG/IMO : MERCURY CONTAINED IN MANUFACTURED ARTICLES
IATA/ICAO : MERCURY CONTAINED IN MANUFACTURED ARTICLES

14.3. Transport hazard class(es)

ADR/RID: 8 (6.1) IMDG/IMO: 8 (6.1) IATA/ICAO: 8 (6.1)

14.4. Packing group

* Remarks IATA/ICAO

ADR/RID: III IMDG/IMO: III IATA/ICAO: III

14.5. Environmental hazards

Marine pollutant : no

14.6. Special precautions for user

Hazard identification number (ADR/RID) : none EmS (IMDG/IMO) : F-A, <u>S-B</u>

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Data not available.

15. Regulatory information

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

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

15.2. Chemical safety assessment

Data not available.

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). Avoid prolonged exposure.

The product contains 3.0 mg mercury.

Overview relevant H-sentences from all components in section 3

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.

H410 Very toxic to aquatic life with long lasting effects.

EUHP99 Suffocating in high concentrations.

Overview relevant hazard statements from all components in section 3

N DANGEROUS FOR THE ENVIRONMENT

T+ VERY TOXIC

Overview relevant R-sentences from all components in section 3

26 Very toxic by inhalation.

48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

May cause harm to the unborn child.
Suffocating in high concentrations.

Training advice

Provide adequate information, instruction and training for operators.

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A key or legend to abbreviations and acronyms use



REACH Registration, Evaluation and Authoris GHS Globally Harmonised System of Clas

CAS Chemical Abstracts Service TGG = TWA Time Weighted Average Lower Explosive Limit LEL Upper Explosive Limit UEL

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

Emergency Schedule EmS

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^{*} Point to alterations with regard to the previous version.

The information provided in this Material Safety Data Sheet is correct to the best of the knowledge, information and belief of Philips Electronics Nederland B.V. at the date of its printing.