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

Revision date: 2019-01-25
Publication date: 2018-10-02
Version number: 1.1

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

Product identifier
- SDS: 33616
- Lamp Material Data Sheet code (LMDS): Philips S16 – 93001A
- Supplier: Signify North America Corporation
  200 Franklin Square Drive
  Somerset, NJ 08873-4186
- Tradename: SOX LOW PRESSURE SODIUM LAMPS
  All Wattages
- Other means of identification: None.

Relevant identified uses of the substance or mixture and uses advised against
- General description: Low Pressure Sodium Lamp
- Recommended Use: Various
- Uses advised against: No data available

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

Emergency telephone number
- Emergency telephone number: CHEMTREC: +1 (0)800-424-9300

SECTION 2: Hazards identification

Classification of the substance or mixture
- Classification 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.

Label elements
- Labelling in accordance with 29 CFR 1910.1200
  Label: not applicable
Remarks on labelling: none

Other hazards

none.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLAS</td>
<td>-</td>
</tr>
<tr>
<td>SODIUM</td>
<td>7440-23-5</td>
</tr>
<tr>
<td>LEAD [PARTICLE DIAMETER &lt; 1MM]</td>
<td>7439-92-1</td>
</tr>
</tbody>
</table>

Remark: The product contains: 1.14 g Sodium

SECTION 4: First aid measures

Description of first aid measures

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

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

Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

Extinguishing media

Suitable fire-extinguisher
determined by surrounding.

Unsuitable fire-extinguisher
not traceable.

Special hazards arising from the substance or mixture

Hazardous decomposition products in fire: Sodium oxide
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

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

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

Precautions for safe handling

Local exhausting : Under normal circumstances not applicable.

Conditions for safe storage, including any incompatibilities

Storage conditions : No special precautions.

SECTION 8: Exposure controls/personal protection

Control parameters

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

TWA (8 hours): 0.05 mg/m³ LEAD - [according to NIOSH]

TWA (8 hours): 0.05 mg/m³ LEAD – [according to OSHA PEL]

Remarks exposure limits : none

Appropriate engineering controls: Under normal circumstances not applicable
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>article</td>
</tr>
<tr>
<td>Color</td>
<td>type dependent</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor threshold (20ºC; 1013 mbar)</td>
<td>not traceable</td>
</tr>
<tr>
<td>pH</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not traceable</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>not traceable</td>
</tr>
<tr>
<td>Flash point/range</td>
<td>not applicable</td>
</tr>
<tr>
<td>Evaporation rate/range</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor rate/range</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>data not available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>not traceable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>not applicable</td>
</tr>
<tr>
<td>Log Po/w</td>
<td>not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not traceable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not applicable</td>
</tr>
<tr>
<td>Dust explosions possible in air</td>
<td>not applicable</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>no</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

Reactivity

Not applicable.

Chemical stability

The substance or mixture is stable under normal conditions.

Possibility of hazardous reactions

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

Conditions to avoid

Data not available.

Incompatible materials

- Hazardous reactions with: none

Hazardous decomposition products
**SECTION 11: Toxicological information**

**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 2B: Possibly carcinogenic to humans (Lead)  
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**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Local</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Remarks symptoms</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

**Toxicity**
Ecotoxicity

not applicable

Persistence and degradability

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

Bioaccumulative potential

Bioconcentration factor (BCF): not applicable

Mobility in soil

Henry Constant: not applicable

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

UN number

DOT/49CFR: none
IMDG/IMO: UN 3363
IATA/ICAO: forbidden

UN proper shipping name

DOT/49CFR: none
IMDG/IMO: DANGEROUS GOODS IN APPARATUS
IATA/ICAO: Forbidden

Transport hazard class(es)

DOT/49CFR: none
IMDG/IMO: 9
IATA/ICAO: Forbidden

Packing group

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

Environmental hazards

Marine pollutant: no

Special precautions for user

EmS (IMDG/IMO): none
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: not applicable.
SARA 311/312: not applicable.
HMIS Classification: not applicable.
U.S. Clean Water Act Section 307 – Toxic Pollutants: not applicable.

National inventories

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

International inventories

DSL/NDSL: This substance is on the DSL (Sodium, Lead)

SECTION 16: Other information

Remarks on SDS: 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
DSL    Canadian Domestic Substances List
NDSL   Canadian Non-Domestic Substances List

* Point to alterations with regard to the previous version.

The information provided in this Safety Data Sheet is believed to be correct as of the date issued. Philips Electronics Nederland B.V. makes no warranty as to its contents, nor as to its fitness for any particular purpose or use.