Environmental information on high-pressure sodium lamps VIALOX®, NAV®

Product description and operating information

OSRAM high-pressure sodium lamps are lamps in the NAV family for ac operation in which the discharge takes place under pressure in an atmosphere of sodium mercury vapour.

High-pressure sodium lamps are available in wattages from 50 to 1,000 W. High-pressure sodium lamps can be operated with integrated or external starters.

Mercury fillers for the OSRAM VIALOX®- NAV® lamp family	
Wattage	Average mercury content [mg]
50 - 400W	24
-1,000W	50

In the cold state, in other words at room temperature (21 $^{\circ}$ C), the mercury and metallic sodium are present in solid form as a sodium amalgam. When the lamp is started, the mercury and sodium vaporise as the temperature in the discharge vessel and heat up in the arc between the electrodes. The temperature of the outer bulb is between 100 and 500 $^{\circ}$ C (max.) depending on the wattage. Once thermal equilibrium is reached, the mercury exerts a pressure of up to 2 bar on the discharge vessel walls; the actual pressure varies depending on the type of lamp.

Health risks

Inhaling mercury or mercury compounds in vapour or powder form can lead to health problems.

Protection against lamp breakages

To avoid health risks we recommend the following procedure in the event of a discharge vessel breaking:

- Remove all the bits of the discharge vessel
- Carefully ventilate the room
- Once the luminaire has cooled down and certainly before it is used again, all residual mercury
 must be thoroughly removed from the inside of the luminaire. To avoid contact with the skin, we
 recommend the use of disposable gloves.

Disposal of used high-pressure sodium lamps

Since high-pressure sodium lamps contain noxious substances (including mercury) they have to be disposed of in Europe as special waste under

EWC-Code 20 01 21* "Fluorescent tubes and other mercury-containing waste"

High-pressure sodium lamps are affected in EU by the scope of WEEE and can be disposed free of charge from private households and small consumers at all communal disposal facilities. More information under www.osram.com/about_us/environment/weee/index.html and your national OSRAM partner.

In other countries the relevant national regulations must be followed.

OSRAM contact address

If you need further information please contact your OSRAM sales partner or the Environmental Affairs & Technical Safety in Munich:

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