



Environmental information on low-pressure sodium lamps SOX, SOX E

• Product description

Low-pressure sodium lamps are mercury-free low-pressure discharge lamps that operate on the following principle: After ignition, sodium vapour in the glass tube emits monochromatic yellow light at 590 nm.

Sodium lamps are available in a range of performance from 18 W to 180 W.

The sodium in the lamp is in solid form in the cold state and vaporises in the inner bulb during the discharge process. Sodium vapour fills the bulb during operation. If a lamp breaks during operation the sodium vapour is released and may ignite as it hits the air. Sodium may condense and react with moisture and carbon dioxide in the air to form sodium carbonate and sodium hydroxide.

If a lamp breaks in the cold state the solid sodium released when the inner bulb breaks may in certain circumstances ignite explosively if high humidity or water is present, forming corrosive sodium hydroxide.

• Health risks

If sodium or sodium hydroxide comes into contact with the skin it can produce caustic burns. Wash immediately in running water; if it splashes in your eye, wash out and seek immediate medical advice.

• Protection against lamp breakages

To avoid risks we recommend the following procedure:

- After the luminaire has cooled down and in any case before it is used again it should be cleaned of any traces of sodium hydroxide with a damp cloth. Use protective gloves to avoid caustic burns to your fingers.
- Broken lamps should be placed in a separate metal container. When clearing up breakages, wear protective gloves and goggles to prevent caustic burns.

Caution: sodium stuck to broken glass may ignite with explosive force. The breakage must be forwarded to a specialist company for disposal

• Disposal of used low-pressure sodium lamps

Low pressure sodium lamps contain caustic substances they have to be disposed in Europe as special waste under

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

Low-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:

Tel.: +49 (0) 89 / 6213 -3309 Fax: +49 (0) 89 / 6213 -3463 Email: infoline@osram.com

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