

Light is OSRAM



Material Safety Data Sheet for transportation OSRAM Fluorescent and Compact Fluorescent lamps Mercury contained in Lamps / UN3506 – 8 – III

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This document provides safety information for practices related with transport of lamps but its contents is not subject to regulation. As transport safety data sheet, it may be requested by carriers and in some states even required by national transport legislation. This document is not an information for the use or other aspects of lamps, find more information at URL www.osram.com/ehs. This data sheet will be updated if necessary and is related with dangerous goods regulations. Meeting certain regulatory criteria may exempt or except our products from specific requirements but which has to be checked by the shipper for mercury, see table 1 and 2. For better reading, „lamp“ is used instead of mentioning single lamp types.

1 Product description

These lamps contain a small quantity of mercury mainly in a vaporized state a (see table 1), encapsulated in a glass bulb. Pictures show some samples of Tube Fluorescent Lamp and Compact Fluorescent Lamps.



Table 1 – Lamp Data

Lamp types	Mercury/Lamp	No solid dangerous goods contained. Number of lamps for ≤ 30 g
Compact Fluorescent lamps	max.5 mg	6000 pcs.
Tube Fluorescent lamps	max.8 mg	3700 pcs.
Other Fluorescent lamps (other forms)	max.15 mg	2000 pcs.

Light is OSRAM**2 Dangerous goods information**

These lamps meet the general dangerous goods criteria for exception from requirements issued with internationally adopted UN Recommendations on the Transport of Dangerous Goods (Rev. 18) subsection 1.1.1.9 "Lamps containing dangerous goods". The quantity of dangerous goods contained in a single lamp is far below 1 g, retail packages of OSRAM do not exceed the regulatory limit value of 30 g for mercury.

Table 2 – Dangerous Goods Regulation

<i>Mode of transport</i>	<i>Mercury per package > 30 g</i>	<i>Dangerous Goods Classification</i>	<i>Regulation (DGR) Proper Shipping Name</i>
Ground Sea	Not relevant	DGR Special Provision 366	Not subject to dangerous goods regulation.
Air	No	IATA-DGR 1.2.11	Not subject to dangerous goods regulation.
	Yes	Class 8, UN3506	Mercury contained in manufactured articles

3 Immediate hazards to health

There are no immediate hazards to health by mercury contained in the lamp as long as the lamp bulb is undamaged. All OSRAM products meet the corporate quality provisions and are protected by safe package. In case of broken lamp bulbs, inhaling vaporized mercury or white dust/powder can lead to health problems. Small particles and substances may pose a risk for health if incorporated e.g. by contamination of skin.

4 Risks of fire or explosion

Lamps are not flammable and do only contain non-combustible substances.

5 Immediate precautions to be taken in the event of an accident or incident

Do not touch parts of broken lamps with skin, use gloves or other proper means of protection avoiding contamination of skin. Following procedure is recommended to avoid health risks:

- Ventilate the room with fresh air.
- Be careful not to cut yourself on shards of glass
- Carefully remove all bits of the broken lamp by using disposable gloves.
- Use disposable towel or sticky tape to remove small pieces or dust/powder from surfaces.
- Use a vacuum cleaner only if the surface leaves no alternative (carpet). Dispose the vacuum bag containing the lamp fragments.
- Dispose both cracked and non-functioning lamps correctly.
- For cleaning: use equipment without copper or aluminium, decontaminate with towel or sticky tape.

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6 Emergency measures

In case of a fire: use extinguishing agent suitable for type of surrounding fire. Substances contained in the lamp are not flammable, gas filling is not under high pressure.

In case of unbroken bulb: avoid lamp breakage.

In case of broken bulb:

- Avoid skin cuttings, do not touch sharp-edged shards of glass.
- If skin is contaminated by substances contained in the lamp: use clear water to clean skin.
- Clean near environment from lamp parts and shards of glass. Use gloves and proper towel.

7 Preliminary first aid measures

Vaporized mercury contained in the lamp may be released if the lamp bulb is broken:

- Only persons for cleaning should remain in the near area, others may come back after cleaning procedure is finished.
- Care for fresh air and avoid inhalation of released vaporized mercury or dust.
- The area should be ventilated thoroughly (≈ 20 minutes).
- Give artificial respiration if person is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and packing materials.
- After skin contact: wash off with plenty of water.
- After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.
- Ensure that medical personnel are aware of the mercury and take precautions to protect themselves.

8 Disposal

Since lamps contain hazardous substances they have to be disposed of as hazardous waste. Disposal of these lamps is free of charge, regulatory requirements have to be applied as published with EWC-Code-200121 "Fluorescent tubes and other mercury-containing waste" and European Directive 2002/96/EC "WEEE" (Waste, Electrical and Electronic Equipment). More information at URL www.osram.com/WEEE or ask your OSRAM contact directly. For disposal in non-EU-states, national legislation must be applied.

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