Lamp Material Data Sheet (LMDS)

LMDS #: CFN – 10001B
Date: 09/06/2019

Product: Compact Fluorescent Lamps CFL-ni – All Types

Section 1. **Manufacturer and Contact Information**

24 HR Emergency Phone Number: (800) 424-9300
Other Information Calls: (800) 555-0050

Section 2. **Hazardous Ingredients/Identity Information**

These lamps may contain the following materials:

Material	(CAS #)	Exposure Limits in Air: OSHA PEL mg/m^3	Exposure Limits in Air: ACGIH TLV mg/m^3	PERCENTAGE by weight
Inert Materials (glass/metals)		-	-	~98.0%
Phosphor Powder				
(as Nuisance Dust)		15	10	<2.0%
Yttrium Oxide (as Yttrium)	(1314-36-9)	1	1	<0.5%
Barium Magnesium Aluminate	(63774-55-0)	n/a	n/a	<0.1%
Cerium Magnesium Aluminate	(67542-72-7)	n/a	10	<0.1%
Indium	(7440-74-6)	0.1	0.1	<0.15%
Bismuth	(7440-69-9)	0.1	n/a	<0.15%
Mercury	(7439-97-6)	0.1	0.025	<0.025%
Isotope (Kr^{85} or H^3)	(713983-27-2/10028-17-8)	-	-	<100ηCi

The Phosphor Powder materials are ceramic phosphors. The ceramics are Cerium/Barium Aluminate and Yttrium Oxide. The PEL and TLV are given where available for the base materials. There is no data for the ceramics as mixtures.

Section 3. **Physical Properties**

Not applicable to an intact lamp. These items are light bulbs in various shapes, configurations, and designs. All contain small glass fluorescent tubes, a plastic housing, and various pin-style bases for use in specific fixtures/sockets. Some lamps may contain isotopes (nanoCurie quantities) to aid in lamp starting - Product packaging is appropriately labeled.

Section 4. **Fire and Explosion Hazards**

Not applicable to an intact lamp. If subjected to extreme heat, the plastic and glass components of the lamp may crack or melt and the lamp may emit toxic fumes.

Section 5. **Reactivity**

Not applicable to an intact lamp.

Section 6. **Health Hazards**

Not applicable to an intact lamp. Breakage of the lamp may result in some exposure to the phosphor powder and to elemental mercury. No adverse effects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged exposure should be avoided through the use of adequate ventilation during the disposal of large quantities of lamps.

Emergency and First Aid Procedures: Apply normal first aid for glass cuts if such should occur through lamp breakage.

Section 7. **Lamp Disposal Procedures**

Normal precautions should be taken for the collection of glass particles in the event a lamp is broken.

Waste Disposal Method: All compact fluorescent lamps contain some amount of mercury. When a compact fluorescent lamp is to be disposed, it is subject to the current EPA Toxicity Characteristic Leaching Procedure (TCLP) disposal criteria. This test is used to determine if an item can be managed of as hazardous or non-hazardous waste.

Philips low-mercury ALTO compact fluorescent lamps are identifiable by their characteristic green logo. Philips ALTO lamps are TCLP compliant and can be managed as non-hazardous waste. Philips will provide TCLP test data upon request.

Philips non-ALTO lamps (with black logo) are not TCLP compliant and should be managed as a hazardous waste under the EPA Universal Waste Rules for fluorescent lamps.

All disposal options should be evaluated with respect to federal, state, and local requirements. Before disposing of waste lamps, check with federal, state, and/or local officials for current guidelines and regulations. Philips encourages recycling of its products through qualified recycling facilities.

Section 8. **Control Measures**

Respiratory Protection: None. NIOSH-approved respirator should be used if large quantities of lamps are being broken for disposal.
Ventilation: Avoid inhalation of any airborne dust. Provide local exhaust when disposing of large quantities of lamps.
Hand and Eye Protection: Appropriate hand and eye protection should be worn when disposing of lamps and/or handling broken glass.

Section 9. **Regulatory Information**

As a product, these mercury-containing lamps, when shipped in the manufacturer's original packaging, are not regulated by air, truck, or ocean shipment. As a waste, these lamps may be regulated in various states and local communities. This safety data sheet does not constitute "knowledge of the waste" in certain jurisdictions.

Occupational Health and Safety Administration (OSHA) Material Safety Data Sheet (MSDS) requirements for materials are not applicable to manufactured articles in which individuals would not be subjected to materials contained in the article during its normally intended use. The information in this document is provided as a courtesy and is intended to provide relevant information in the event the articles it covers are encountered during unintended, or abnormal, circumstances.