Lamp Material Data Sheet (LMDS)

Product: Philips LED Lamps
   All Lamp Types, Base Types, and Wattages

Section 1. Manufacturer and Contact Information

Philips Lighting Company
Division of Philips Electronics North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873-4186

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

Section 2. Hazardous Ingredients/Identity Information

These lamps do not contain any hazardous materials in reportable quantities.

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<th>Material</th>
<th>Exposure Limits in Air</th>
<th>PERCENTAGE by weight</th>
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Section 3. Physical Properties

Not applicable to an intact lamp. These items are light bulbs in various shapes, configurations, and designs. All contain solid-state light emitting diodes (LEDs) as the light-generating source. These LEDs are contained in various bulb (envelop) types and shapes that may be constructed of aluminum, glass, plastic, or a combination of these materials. Some products also contain circuitry to energize the LEDs. All lamps are fitted with a metal base or pins for installation in appropriate lighting fixtures. These bases are generally comprised of aluminum, nickel-plated tin, nickel-plated brass, plastic or a combination of these materials.

Section 4. Fire and Explosion Hazards

Not applicable to an intact lamp. Under extreme heat the outer glass (or plastic) envelope may melt or crack.
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 exposure to electrical shock hazards if the lamp is still installed in a fixture.

No adverse health 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.

These lamps become warm while operating, however they do not pose a burn hazard.

If the outer bulb breaks, the inner discharge capsule may continue to operate. Disconnect, or turn off, power to the lamp fixture and allow the lamp to cool down sufficiently before attempting to remove it from the fixture. Normal precautions should be taken when handling any broken lamp components.

Emergency and First Aid Procedures: Apply normal first aid for lacerations if such should occur when handling broken lamps.

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: These lamps do not contain any materials that would subject them to special waste disposal 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 lamp 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 lamps.

Section 9. **Regulatory Information**

These lamps do not contain any materials that would subject them to special waste disposal or transportation requirements.

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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.