



## Lamp Material Information Sheet

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### Material Safety Data Sheets (MSDS) Information and Applicability

The Material Safety Data Sheet (MSDS) requirements of the Occupational Safety and Health Administration (OSHA) for chemicals are not applicable to manufactured articles such as lamps. No material contained in a lamp is released during normal use and operation.

The following information is provided as a service to our customers. The following Lamp Material Information Sheet contains applicable Material Safety Data Sheet information.

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### I. Product Identification

#### LITETRONICS LED Replacement Lamps

Litetronics International, Inc.  
6969 W 73<sup>rd</sup> Street  
Bedford Park, IL 60638  
(800) 860-3392

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### II. Lamp Materials and Hazardous Ingredients

**THERE ARE NO KNOWN HAZARDS FROM EXPOSURE TO LED LAMPS THAT ARE INTACT.**

#### Lamp Assembly – Glass and Metal

The glass used in some of the LED lamps is manufactured from soda-lime glass and is essentially similar but not identical to that used throughout the glass industry for incandescent lamps, bottles and other common consumer items. Some of the glass may contain a thin coating of clay and silica inside the surface of the glass. The lamp bases are generally nickel-plated brass. The heat sinks and housings are aluminum. None of these materials would present a hazard in the event of breakage of the lamp, aside from the obvious ones due to broken glass.

#### LED

Replacement Lamps use LEDs that emit white light. The LED's composition consists of metals, phosphor, plastics and InGaN (Indium Gallium Nitride) semiconductor chip. Due to their insolubility and inertness, these materials do not present a significant hazard.

#### Electronic LED Driver

The electronic LED driver is built into the lamp housing. The driver consists of parts that are essentially similar, but not identical, to those used throughout the electronics industry for other common consumer electronic equipment.

### **Plastic Materials**

The plastic is Polycarbonate, PMMA (Poly(methyl methacrylate), PBT (Polybutylene-terephthalate) or PET (Polyethylene-terephthalate) fire retarded plastic with a bromine-containing polymer and antimony oxide. This product consists primarily of high molecular weight polymers that are not hazardous.

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### **III. Health Concerns**

There are no known health hazards from exposure to lamps that are intact. No adverse effects are expected from occasional exposure to broken lamps. If the lamp is broken and the LEDs are exposed, do not look directly into the LEDs. As a matter of good practice, avoid prolong or frequent exposure to broken lamps. The major hazard from broken lamps is the possibility of sustaining cuts from the glass and eye injury if you look directly into exposed LEDs when emitting light.

### **UV**

The Ultraviolet energy emitted by LED lamps complies with the Photobiological Safety of Lamps IEC 62471.

### **IV. Disposal Concerns**

#### **LED Replacement Lamp**

Dispose in accordance with local regulations. Recycling is recommended but not necessary.