

Material / Product Safety Datasheet LIGHT EMITTING DIODE (LED) LAMPS

Wamco brand Light Emitting Diode (LED) Lamps

PRODUCT IDENTIFICATION

Wamco LED Lamps:

This MSDS applies only to the following LED lamp(s):

Wamco p/n: WL-L04MR16GU-UV405FL
Ecolab p/n 8363-0100

HAZARDOUS INGREDIENTS

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. No adverse effects are expected form occasional exposure to broken lamps. The major hazard from broken lamps is the possibility of sustaining glass cuts.

Lamp assembly:

The glass cover used in Wamco's WL-L04MR16GU-xxx LED lamp 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 covers may contain a thin coating of clay and silca on the back inside surface of the glass cover. The lamp contacts are generally nickel-plated brass. None of these materials would present a hazard in the event of breakage of the lamp, aside from possible skin puncture from the broken glass shards. However, the glass cover includes a shatterproof film to contain broken glass shards in the event of breakage. The potential for skin puncture is very limited.

LED

The LED's composition consists of metals, 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 Material

The plastic housing is typically made of PC (Polycarbonate) fire retarded plastic with a bromine-containing polymer and antimony oxide. This product consists primarily of high molecular weight polymers that are not hazardous.

HEALTH CONCERNS

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

EMERGENCY AND FIRST AID PROCEDURES:

Glass Cuts: Perform normal first aid procedures. Seek medical attention as required.



UV

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

DISPOSAL CONCERNS

LED Lamp Disposal:

Dispose in accordance with local regulations; recycling is recommended for large quantity disposal.

EU RoHS:

Products listed above are in compliance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (also known as "RoHS Recast").

Substance
Lead (Pb)
Cadmium (Cd)
Mercury (Hg)
Hexavalent Chromium (Cr6+)
Poly Brominated Biphenyls (PBB)
Poly Brominated Diphenyl ethers (PBDE)

EU REACH:

Products listed above are in compliance to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Specifically, products manufactured do not contain the substances listed in the following sections of this directive:

- WAMCO products do not contain any of the Substances of Very High Concern (SVHC) as defined in Article 57 and Annex XIV with amendments dated:
 - o 9 October 2008
 - o 13 January 2010
 - o 30 March 2010
 - o 18 June 2010
 - o 15 December 2010
 - o 20 June 2011
 - o 19 December 2011
 - o 18 June 2012
 - o 19 December 2012
 - o 20 June 2013
 - o 16 December 2013
 - o 16 June 2014
 - o 17 December 2014
 - o 15 June 2015
 - o 17 December 2015
 - o 20 June 2016
 - o 19 December 2016
- WAMCO products do not contain any of the substances as described in Article 67 and Annex XVII (with amendments).



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