

Lamp Material Information Sheet

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.

I. Product Identification

Mercury Vapor Lamps

II. Lamp Materials and Hazardous Ingredients

Glass

These lamps consist of an inner quartz arc tube enclosed in a protective outer envelope of ultra violet (UV) grade quartz.

Arc Tube

The quartz arc tube contains a small amount of mercury, ranging from 10 to 12 milligrams in the UV lamp. The quartz arc tube contains a small amount of inert gas (argon) used as a fill gas. It also contains a small amount of other materials, used as an emission mix on the electrodes, but there would be no significant exposure from lamp breakage.

Metals

Internally, the support wires used in the lamp construction are made from nickel-coated iron or stainless steel while the electrodes are molybdenum. The mercury lamps use a nickel base and have lead-soldered connections to that base.

III. Health Concerns

Mercury Exposure

The air concentration of mercury resulting from the breakage of one or a small number of lamps should result in no significant exposure to the individual. However, if breaking a large number of lamps for disposal, appropriate monitoring, controls and equipment should be implemented to control airborne mercury and dust levels or surface contamination. Such work should be done in a well-ventilated area, and local exhaust ventilation or personal protective equipment may be needed.

Ultraviolet (UV) Radiation

The quartz arc tube, when operating, generates a specified amount of ultraviolet radiation. To lamp cannot emit UV unless the unit has been installed with batteries AND the water detection circuit determines that the lamp has been completely immersed in water. The previously mentioned water detection is to protect the consumer when operating in accordance with the User's Manual. When used improperly there is danger of harm to the eyes and skin. In accordance with the appropriate regulatory bodies the following warning notice is included within the User's Manual:

“UV light can be harmful to the eyes and skin. Never look at an unshielded lamp during operation. When used properly, according to the instructions, the user is well shielded from UV light.”

IV. Disposal Concerns

TCLP

A Toxicity Characteristic Leaching Procedure (TCLP) test conducted on the lamp for mercury could cause the lamp to be classified as a hazardous waste. Mercury lamps use mercury in the arc tube. The mercury vapor should pose little risk of exposure under normal use and handling. While small numbers of these lamps placed in the ordinary trash should not appreciably effect the nature or method of disposal of the trash in most states, under some circumstances disposal of large quantities may be regulated. You should review your waste handling practices to assure that you dispose of waste lamps properly. Please check with state environmental departments regarding individual state disposal requirements.