Compact Fluorescent Lamp Material Safety Data Sheet (MSDS)

Compact Fluorescent Lamps - Twists, Floods, Globes, A-Bulbs, Torpedo and Pin-Based Lamps

INFORMATION AND APPLICABILITY
Westinghouse Lighting Corporation believes that under the Occupational Safety and Health Administration (OSHA) Hazards Communications Standard, a lamp (light bulb) is exempted as an “article” so it does not require an MSDS. The original OSHA Standard defined an article as something that: 1) is formed to a specific shape and design, 2) has end use functions dependent upon its shape and design, and 3) does not release or otherwise result in an exposure to a hazardous chemical under normal conditions of use. In February, 1994, OSHA amended the Hazard Communication Standard and modified Part 3 of the above to read: 3) does not release more than very small quantities of a hazardous chemical under normal conditions of use. State and local regulations also contain similar exemptions for such articles.

Hazardous materials are not released during normal use and operation of these lamps.

PRODUCT AND COMPANY IDENTIFICATION
Trade Names include: Mini-Twist™, Mini-Spiral, Twist™, Spiral, Triple™, Globe, Reflector, 3-Way. These lamps are for use in general lighting applications. These CFLs can consist of lamp ballast/adapter as a single unit, or lamp alone with no ballast/adapter.

Manufacturer: Westinghouse Lighting Corporation, 12401 McNulty Road, Philadelphia, PA 19154, 1-800-999-2226.

COMPOSITION/ INFORMATION ON INGREDIENTS
There are no known health hazards from exposure to lamps which are not broken or damaged in any way.

Lamp Assembly – Glass and Metal – The glass is made from soda lime, a similar type of glass that is used throughout the glass industry for other consumer items. The metals for end caps and filaments are generally made from various amounts of aluminum, tin, lead, copper, zinc and nickel. If the lamp broke, none of these materials would present a potential hazard, aside from possible injury due to broken glass.

Mercury – Small amounts of mercury are used in all fluorescent lamps (generally around 0.025% by weight). The amount of mercury in any given lamp varies depending on both the size of the lamp and the equipment that was used in its production. Westinghouse Lighting continues to reduce the amounts of mercury used in fluorescent products.

Phosphor – (nuisance dust) phosphate mix using manganese, rare earth elements such as lanthanum, and yttrium as either an oxide or as a phosphate, along with a barium/aluminum oxide are all tightly bound in the phosphor matrix. The phosphors produce better lamp efficiency and color rendition. The phosphor components may vary slightly depending on the color of the lamp. Some lamps may contain a thin coating of tin oxide inside the glass.

PHYSICAL PROPERTIES
Not applicable to a lamp not broken or damaged.

EXPLOSION HAZARDS
When exposed to high temperatures, toxic fumes may be emitted from broken lamps.

HEALTH CONCERNS
THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE NOT BROKEN OR DAMAGED. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of being cut by the broken glass.

Mercury
The mercury in the air as a result of breaking one or a small number of fluorescent lamps should not result in significant damage. However, when breaking a large number of lamps for disposal, appropriate industrial hygiene monitoring and controls should be implemented to minimize airborne levels of mercury or surface contamination. We recommend a well-ventilated area, and local exhaust ventilation or personal protective equipment.

Phosphor
There have been no significant adverse effects on humans by ingestion, inhalation, skin contact or eye contact. Antimony, manganese, yttrium and tin compounds are characterized by OSHA as hazardous chemicals, however, due to their insolubility as well as their relatively low toxicity and small amount present in the phosphor and lamp, these materials do not present a significant hazard in the event of the lamp being broken.

Glass
Glass dust is considered to be physiologically inert so it has an OSHA exposure limit of 15-mg/cubic meter for total dust, and 5-mg/cubic meter for respirable dust. If glass dust is inhaled or ingested, perform normal first aid procedures and seek medical attention if needed.

Inhalation
If discomfort, irritation or symptoms of pulmonary distress develop, leave the site of exposure and seek medical attention.

Ingestion
In the unlikely event of ingestion, seek medical attention.

Contact
Wash skin or flush eyes, including under eyelids, immediately and seek medical attention.

Eyes/Skin

PROCEDURE FOR DISPOSAL OF LAMPS
Take the usual precautions for getting rid of broken glass. Place materials in closed containers to avoid generating dust. A Toxicity Characteristic Leaching Procedure (TCLP) was conducted on these products showing the mercury content in these lamps is not considered hazardous waste. For field disposal, the lead in the soldering is considered hazardous waste and must be disposed of by applicable federal, state and local regulations.

Although Westinghouse Lighting attempts to provide current and accurate information, it makes no representation regarding the accuracy of completeness of the information and assumes no liability for any loss, damage or injury of any kind which may result from or arise out of the use of/or reliance on this information.

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