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Compact Fluorescent Safety Specifications

Material Safety Data Sheet (MSDS)

Compact Fluorescent Lamps: Spiral Lamps, Floods, Globes, A-Bulbs, Torpedoes, Circle lamp,PL Lamps. Linear Fluorescent tubes

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I. 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 courtesy to our customers. The following Lamp Material Information Sheet contains applicable Material Safety Data Sheet information.

II. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: %DWXOHV 3OXV Compact Fluorescent Lamps（For general lighting application）. Consist of lamp ballast / adapter as a unit or lamp alone, no ballast / adapter.

Ascent: Hartland, WI 53029

III. COMPOSITION / INFORMATION ON INGREDIENTS

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

Lamp Assembly – Glass and Metal – The Glass is made from soda lime similar to that used throughout the glass industry for other common consumer articles. The metals are generally made from various amounts of Aluminum, Tin, Lead, Copper, Zinc and Nickel. None of the materials would present a potential hazard in the event of breakage of the lamp, aside from the hazard due to broken glass.

Mercury – Small amounts of mercury is used in all fluorescent lamps, generally around 0.025% by weight. %DWXOHV 3OXV FRQWLQXHV to reduce the amounts of mercury used in fluorescent lamps.

Phosphor – 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 all are tightly bound in the phosphor matrix. These 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.

IV. HEALTHY CONCERNS

THERE ARE NO KNOWN HEATH HAZARDS FROM EXPOSURE TO LAMPS THAT INTACT. 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 form broken lamps is the possibility of sustaining glass cuts.

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

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Glass – Glass dust is considered to be physiologically inert and as such has an OSHA exposure limit of 15-mg/cubic meter for total dust and 5-mg/cubic meter for respirable dust. Perform normal first aid procedures. Seek medical attention as required.

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, relatively low toxicity and small amount present in the phosphor and lamp, these materials do not present a significant hazard in the event of breakage of the lamp.

Tin: Contact, ingestion or inhalation may cause one or more of the following symptoms: eye irritation, skin irritation, and respiratory system irritation.

Manganese: Contact, ingestion or inhalation may cause one or more of the following symptoms: Parkinson's, asthenia, insomnia, mental confusion, metal fume fever, dry throat, cough, chest tightness, dyspnea, rales, flu-like fever, low- back pain, vomiting, malaise fatigue, and kidney damage.

Yttrium: Contact, ingestion or inhalation may cause one or more of the following symptoms: eye irritation, pulmonary irritation, and possible liver damage.

Antimony: Contact, ingestion or inhalation may cause one or more of the following symptoms: eye irritation, skin irritation, nose irritation, mouth irritation, throat irritation, cough dizziness, headache, nausea, vomiting, diarrhea, stomach cramps, insomnia, anorexia, and unable to smell properly.

Fluoride: Fluoride – containing dust may cause irritation of the eyes and respiratory tract. Swallowing fluoride may cause a salty or soapy taste, vomiting, abdominal pain, diarrhea, shortness of breath, difficulty in speaking, thirst, and weakness of the pulse.

V. PROCEDURES FOR DISPOSAL OF LAMPS

Take usual precautions for collection of broken glass. Place materials in closed containers to avoid generating dust. A Toxicity Characteristic Leaching Procedure (TCLP) was conducted on these products showing a result of mercury content that 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.

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