

Lamp Material Data Sheet (LMDS)

LMDS #: MV - 09100

Date: 08/05/2009

Product: Philips Mercury Vapor Lamps – All Wattages

All Standard Mercury Vapor Lamps – Medium and Mogul Base
H33, H36, H37, H38, H39, H43, H44, H45, H46 Types

Page 1 of 2

Section 1. Manufacturer and Contact Information

Philips Lighting Company Division of Philips Electronics North America Corporation
200 Franklin Square Drive
P.O. Box 6800
Somerset, NJ 08875-6800

24 HR Emergency Phone Number: (800) 424-9300 CHEMTREC
Other Information Calls: (800) 555-0050 Philips Lighting Technical Information

Section 2. Hazardous Ingredients/Identity Information

These lamps contain the following materials:

Material	(CAS #)	Exposure Limits in Air		PERCENTAGE by weight
		OSHA PEL mg/m ³	ACGIH TLV mg/m ³	
Phosphor Powder (as Nuisance Dust)		15	10	<2.5%
Yttrium Oxide (as Yttrium)	(1314-36-9)	1	1	<0.5%
Barium Carbonate	(0513-77-9)	0.5	0.5	<0.1%
Manganese Carbonate	(598-62-9)	5	5	<0.1%
Tin	(7440-31-5)	0.1	0.1	<0.1%
Indium	(7740-74-6)	0.1		<0.07%
Bismuth	(7440-69-9)			<0.005%
Mercury	(7439-97-6)	0.05	0.025	<0.05%
Inert Materials (glass, metal)				>97.0%

The Phosphor Powder materials are ceramic phosphors. The ceramics are Barium Aluminate and Yttrium Oxide. The PEL and TLV are given where available for the base materials. There is no data for the ceramics as mixtures.

Section 3. Physical Properties

Not applicable to an intact lamp. These items are light bulbs in various shapes, configurations, and designs. All contain a light generating arc tube, housed inside a glass envelope, and a threaded base for use in standard or industrial lamp sockets.

Section 4. Fire and Explosion Hazards

Not applicable to an intact lamp. If subjected to extreme heat, the glass components of the lamp may crack or melt and the lamp may emit toxic fumes.

Section 5. Reactivity

Not applicable to an intact lamp.

Section 6. Health Hazards

Not applicable to an intact lamp. Breakage of the lamp may result in some exposure to the phosphor powder (for a coated bulb) and to elemental mercury. No adverse effects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged exposure should be avoided through the use of adequate ventilation during the disposal of large quantities of lamps.

WARNING! These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if the outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes when envelope is broken unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken are available commercially.

Emergency and First Aid Procedures: Apply normal first aid for glass cuts if such should occur through lamp breakage.

Section 7. Lamp Disposal Procedures

Normal precautions should be taken for the collection of glass particles in the event a lamp is broken.

Waste Disposal Method: All mercury vapor lamps contain some amount of mercury. When a mercury vapor lamp is to be disposed, it is subject to the current EPA Toxicity Characteristic Leaching Procedure (TCLP) disposal criteria. This test is used to determine if an item can be managed as hazardous or non-hazardous waste.

Philips non-ALTO lamps (with black logo) are not TCLP compliant and should be managed as a hazardous waste under the EPA Universal Waste Rules for fluorescent lamps. Mercury vapor lamps are not TCLP compliant.

All disposal options should be evaluated with respect to federal, state, and local requirements. Before disposing of waste lamps, check with federal, state, and/or local officials for current guidelines and regulations. Philips encourages recycling of its products through qualified recycling facilities.

Section 8. Control Measures

Respiratory Protection: None. NIOSH-approved respirator should be used if large quantities of lamps are being broken for disposal.

Ventilation: Avoid inhalation of any airborne dust. Provide local exhaust when disposing of large quantities of lamps.

Hand and Eye Protection: Appropriate hand and eye protection should be worn when disposing of lamps and/or handling broken glass.

Section 9. Regulatory Information

As a product, these mercury-containing lamps, when shipped in the manufacturer's original packaging, may be regulated for air, truck, or ocean shipment. As a waste, these lamps may be regulated in various states and local communities. This safety data sheet does not constitute "knowledge of the waste" in certain jurisdictions.

This document supercedes previous documents:

- S05-93001 prepared 1991 and last revised 09/2005
- and: S05-93002 prepared 1993 and last revised 06/2001
- and: S05-93003 prepared 1994 and last revised 06/2001
- and: S05-93004 prepared 1994 and last revised 06/2001
- and; S05-93005 prepared 1993 and last revised 06/2001
- and; S05-93006 prepared 1993 and last revised 06/2001
- and; S05-93007 prepared 1993 and last revised 06/2001.

Occupational Health and Safety Administration (OSHA) Material Safety Data Sheet (MSDS) requirements for materials are not applicable to manufactured articles in which individuals would not be subjected to materials contained in the article during its normally intended use. The information in this document is provided as a courtesy and is intended to provide relevant information in the event the articles it covers are encountered during unintended, or abnormal, circumstances.