MATERIAL SAFETY DATA SHEET

PRODUCT: Fluorescent Lamp F40T12/Advantage ALTO

Revised 8/02

SECTION 1: MANUFACTURER

Manufacturer's Name and Address: Philips Lighting Company

A Division of Philips Electronics North America Corporation 200 Franklin Square Drive Somerset, New Jersey 08875

Emergency Telephone No.: (800) 424-9300 CHEMTREC

(732) 563-3197 Safety and Compliance

Other Information Calls: (800) PLC BULB



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SECTION 2:	HAZARDOUS	INGREDIENTS

O	SHA (PEL) mg/m ³	ACGIH (TLV) mg/m³ TWA	% by Wt.
Inert Ingredients (glass, wire, alumir	num)		approx. 97.5
Phosphor powder & as nuisance dust	15 mg/m ³	10mg/m ³	Less than 2.0
Aluminum Oxide (1344-28-1)		10mg/m ³	approx5
Barium Magnesium Aluminate	None Est'd	7	max1
Yttrium Oxide (68585-82-0)	1.0 mg/m^3	1.0 mg/m ³	max9
Lanthanum Phosphate (95823-34-0)	None Est'd		max6
Mercury (7439-97-6)	$.10 \text{ mg/m}^3$	$.025 \text{ mg/m}^3$	Less than 20 ppm

SECTION 3: CHEMICAL/PHYSICAL DATA

Not applicable. This item is a light bulb. Up to 8 foot long and up to 1.5 inches in diameter.

SECTION 4: FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION DATA NOT APPLICABLE -- under extreme heat, glass envelope might melt or crack.

SECTION 5: REACTIVITY DATA

Stability:

Lamp is stable.

Polymerization: Not applicable.

Incompatibility: Glass will react with Hydrofluoric Acid.

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SECTION 6: HEALTH HAZARD DATA

Not applicable to the intact lamp. Breakage of the lamp may result in some exposure to the phosphor powder dust and to a very little amount of elemental mercury vapor. No adverse affects are expected from occasional exposure to broken lamps, but as a matter of good practice, prolonged or frequent exposure should be avoided through the use of adequate ventilation during disposal of large quantities of lamps.

EMERGENCY FIRST AID: NORMAL FIRST AID PROCEDURE FOR GLASS CUTS IF SUCH OCCUR THROUGH LAMP BREAKAGE.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USAGE

Normal precautions should be taken for the collection of broken glass.

Waste Disposal Method: At the end of rated life, when this lamp is removed from service, it will be subjected to the current Toxic Characteristic Leaching Procedure (TCLP) prescribed by the Environmental Protection Agency. This test is used to determining whether an item is a hazardous waste or a non-hazardous waste under current E. P. A. definition. Philips Lighting will provide the test data on request. This result will allow the generator to evaluate all of the disposal options, which may be available in the particular state in which the generator's facility is located. The generator should check with federal, state and local officials for their guidance. In most states ALTO lamps are considered non-hazardous subtitle D waste. Philips encourages recycling of its products by qualified recyclers.

SECTION 8: CONTROL MEASURES

Respiratory Protection: None. NIOSH-approved respirator might be used if large volumes 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 large quantities of lamps or handling broken lamps.

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SECTION 9: REGULATORY ISSUES

As a product these mercury containing lamps being shipped in the manufacturer's original packaging are not regulated by air, truck or ocean shipment. As a waste, spent ALTO fluorescent lamps maybe regulated in various states and local communities. This material safety data sheet does not constitute "knowledge of the waste", in certain jurisdictions. TCLP data will be furnished upon request.

PHILIPS

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