

Philips Lighting Company

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MATERIAL SAFETY DATA SHEET

Revised: 8/02

PRODUCT: ALTO[®] Fluorescent T12 U-Bent Lamps, Spec[®] Series, Ultralume[®] Series

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: (732) 563-3488

SECTION 2: HAZARDOUS INGREDIENTS

	OSHA (PEL) mg/m ³	ACGIH (TLV) mg/m ³ TWA	% by Wt.
<u>Inert Ingredients (Glass, Aluminum, etc.)</u>			Approx 97%
Phosphor Powder			Approx 3%
Nuisance Dust	15	10	
Fluorides* (as F)		2.5	Approx .01%
Antimony*(7440-36-0)	.5	.5	Approx .01%
Manganese*(7439-96-5)			
Cerium Magnesium Terbium			
Aluminate*†	N/A	10	Approx .25%
Barium Magnesium aluminate*†	N/A	10	Approx .5%
Yttrium Oxide (1314-36-9)*†	1.0	1.0	Approx .5%
Aluminum Oxide (1344-28-1)	10	10	Approx .1%

SECTION 2: HAZARDOUS INGREDIENTS(cont'd)

	OSHA (PEL) mg/m ³	ACGIH (TLV) mg/m ³ TWA	% by Wt.
Mercury (7439-97-6)	.1	.025	< than 20 ppm

*These materials are tightly bound within the crystal matrix of the phosphor (Calcium Phosphate).

† PEL & TLV are given for magnesium, aluminum oxide, and yttrium. Barium aluminate is not a soluble compound.

SECTION 3: CHEMICAL/PHYSICAL DATA

Not applicable. This item is a light bulb 2 ft. long, 1.5 inches in diameter. The bulb is glass, the base is a coated aluminum. The coating is inert.

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.

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 effects 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 USE

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 determine 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 7: PRECAUTIONS FOR SAFE HANDLING AND USE -Continued

Disposal is currently regulated in Minnesota, Vermont, Connecticut, the incinerator counties of Florida and in Maine (mid 2002). The generator should check with local and state officials for their guidance. Philips encourages recycling of its products by qualified recyclers.

SECTION 8: CONTROL MEASURES

Respiratory Protection: Appropriate dust mask 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 large quantities of lamps or handling broken lamps.

SECTION 9: REGULATORY INFORMATION

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.