



## Philips Lighting Company

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### MATERIAL SAFETY DATA SHEET

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Revised: 8/02

PRODUCT: **ALTO™ Fluorescent T8 U-Bent Lamp F32** T8/TL 700 Series

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### SECTION 1: MANUFACTUERER

Manufacturer's Name and Address: Philips Lighting Company  
A Division of Philips Electronics  
North America Corporation  
200 Franklin Square Drive  
P.O. Box 6800  
Somerset, NJ 08875

Emergency Telephone Number: (800) 424-9300 CHEMTREC  
(732) 563-3197 Safety and Compliance

Other Information Calls: (800) PLC-BULB

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### SECTION 2: HAZARDOUS INGREDIENTS

	OSHA (PEL) mg/m <sup>3</sup>	ACGIH (TLV) mg/m <sup>3</sup>	% by Wt.
Phosphor Powder			
Nuisance Dust	15	10	Approx. 2.5
Cerium Terbium			
Magnesium Aluminate*	N/A	10	Approx. .25
Barium Magnesium Aluminate*	N/A	1.0	Approx. .5
Yttrium Oxide (1314-36-9)	1.0	1.0	Approx. .5
Antimony+ (7440-36-0)	.5	.5	Approx. .01
Manganese+ (7439-96-5)	.5	.2	Approx. .02
Calcium Phosphate (1306-06-5)	15	10	Approx. 1

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A division of  
Philips Electronics North America Corporation

200 Franklin Square Drive  
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Tel: 732.563.3000

**SECTION 2: HAZARDOUS INGREDIENTS(cont'd)**

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

\* PEL and TLV are given for Magnesium, Aluminum Oxide, and Yttrium, Barium Aluminate is not a soluble compound.

+These materials are tightly bound within the crystal matrix of the phosphor.

**SECTION 3: CHEMICAL/PHYSICAL DATA**

Not applicable. This item is a light bulb. 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 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.

**SECTION 6: HEALTH HAZARD DATA(cont'd)**

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

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**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.

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**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.

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**Section 9: Regulatory Status**

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.

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**PHILIPS**