



## Philips Lighting Company

### MATERIAL SAFETY DATA SHEET

**PRODUCT: CERAMALUX™ HPS with ALTO™ LAMP TECHNOLOGY  
1000 WATT Including Non-Cycling**

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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: (607) 776-3311 Ext. 300

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#### SECTION 2: HAZARDOUS INGREDIENTS

	OSHA PEL	ACGIH	PERCENTAGE
Barium (7440-39-3)	8-hr TWA 0.5 mg/m3	.5mg/m3	<400 ppm
Sodium (7440-23-5)	8-hr TWA 2.0 mg/m3	ceiling 2 mg/m3	<10 ppm
Silver (7440-22-4)	8-hr TWA 0.01 mg/m3	TWA 0.1 mg/m3	<30 ppm
Mercury (7439-97-6)	.1 mg/m3	.025 mg/m3	.01%
Copper (7440-50-8) dusts and mists	8-hr TWA 1 mg/m3	1 mg/m3	<2%
Inert ingredients (Glass, Sintered Aluminum Oxide, Brass)			

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#### SECTION 3: PHYSICAL CHEMICAL CHARACTERISTICS

This item is a light bulb with a brass base and a refractory alumina inner arc tube.  
Chemical/physical data as in a standard MSDS are not applicable

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Tel: 732.563.3000

#### **SECTION 4: FIRE AND EXPLOSION DATA**

Fire and explosion data not applicable to the intact lamp. There is very little sodium in this lamp. Exposing the broken inner arc tube to water will not produce a fire. Under extreme heat, outer glass envelope might melt or crack. The inner arc tube is composed of polycrystalline alumina and is a refractory material.

#### **SECTION 5: REACTIVITY DATA**

**Stability:** The lamp is stable

**Incompatibility:** Glass envelope will react with hydrofluoric acid. Sodium reacts with water, but in this case the amount of sodium is small enough that the reaction will not be vigorous.

#### **SECTION 6: HEALTH EFFECTS**

Not applicable to the intact lamp. The inner envelope is composed of polycrystalline alumina. Breakage of this envelope may result in some exposure to elemental sodium and mercury. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, breakage should be avoided. Prolonged or frequent exposure to broken envelopes should be avoided through the use of adequate ventilation during disposal of large quantities of lamps.

#### **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 8: CONTROL MEASURES**

**Respiratory Protection:** Appropriate dust mask should be used if large quantities of lamps are being broken for disposal. **NOTE:** the Universal Waste Rule issued for mercury containing lamps issued July 6, 1999 by the E.P.A. specifically discusses the requirement for a permit if a generator desires to crush lamps on site. Check with your local officials.

**Ventilation:** Avoid inhalation of any airborne dust. Provide carbon filtration of local exhaust if it is permitted 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 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.