Philips Lighting Company

MATERIAL SAFETY DATA SHEET
PRODUCT: Fluorescent Lamp (Standard Cool White, Warm White)

SECTION 1 MANUFACTURER

Manufacturer's Name and Address: Philips Lighting Company
A Division of Philips Electronics
North America Corporation
200 Franklin Square Drive
Somerset, N. J. 08875-6800

Emergency Telephone No.: (908) 563-3197
Other Information Calls: (908) 563-3490

SECTION 2 HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Inert ingredients (glass, aluminum, etc.)</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphor powder +</td>
<td></td>
<td></td>
<td>approx. 97% by wgt.</td>
</tr>
<tr>
<td>nuisance dust</td>
<td>15mg/m3</td>
<td>10mg/m3</td>
<td>approx. 3% by wgt.</td>
</tr>
<tr>
<td>fluorides +</td>
<td>2.5mg/m3</td>
<td>2.5mg/m3</td>
<td>approx. .01% by wgt.</td>
</tr>
<tr>
<td>antimony + (7440-36-0)</td>
<td>.5mg/m3</td>
<td>.5mg/m3</td>
<td>approx. .01% by wgt.</td>
</tr>
<tr>
<td>manganese + (7439-90-5)</td>
<td>5mg/m3(c)</td>
<td>5mg/m3</td>
<td>approx. .02% by wgt.</td>
</tr>
<tr>
<td>Mercury (7439-97-6)</td>
<td>.05 mg/m3</td>
<td>.05 mg/m3</td>
<td>approx. .01% by wgt.</td>
</tr>
</tbody>
</table>

+These materials are tightly bound within the calcium phosphate crystal matrix.

SECTION 3 PHYSICAL CHEMICAL CHARACTERISTICS

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
Incompatability: Glass will react with Hydrofluoric Acid
Polymerization: Not applicable
SECTION 6 HEALTH HAZARD DATA

Not applicable for the intact lamp. Breakage of the lamp may result in some exposure to the phosphor powder dust/and to 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 AND FIRST AID PROCEDURE: 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 collection of broken glass.

WASTE DISPOSAL METHOD: Under the new Toxicity Characteristic Leaching Procedure (TCLP) promulgated by the U.S. Environmental Protection Agency (EPA), tests of used or spent fluorescent, incandescent, and high intensity discharge lamps indicate that some types of these lamps may be classified as characteristic hazardous waste. Notably, the TCLP test results for fluorescent lamps vary tremendously from laboratory to laboratory. Lamps from all manufacturers exhibit the same phenomena. The National Electrical Manufacturers Association (NEMA) is working closely with the EPA for clarification and guidance.

Small numbers of these lamps placed in ordinary trash may not appreciably affect the method of lamp disposal. If spent lamps are added to other regulated wastes or disposed in large quantities, disposal of lamps may be regulated. Customers should review their waste handling practices to assure that they are properly disposing of waste lamps.

SECTION 8 CONTROL MEASURES

Respiratory Protection: Appropriate dust mask should be used if large volumes of lamps are being broken for disposal.

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

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