

## MATERIAL SAFETY DATA SHEET

PRODUCT: HIGH PRESSURE SODIUM LAMPS

Revision: April 20, 2006

SLi Lighting brand high pressure sodium lamps, supplied by SLi Lighting, are exempted from the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are "articles". The following information is provided as a courtesy to the customers.

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### SESSION 1: MANUFACTURER

Manufacturer's Name and Address: SLI Lighting  
122 East Laurel Street  
Mullins, SC 29574  
Phone: 800-922-6693  
Fax: 843-464-6135

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### SESSION 2: HAZARDOUS INGREDIENTS

|                     | <u>OSHA PEL</u>              | <u>ACGIH TLV</u>               | <u>PERCENTAGE</u>    |
|---------------------|------------------------------|--------------------------------|----------------------|
| Sodium (7440-23-5)  | 2 mg/m <sup>3</sup><br>8-TWA | Ceiling<br>2 mg/m <sup>3</sup> | less than .01        |
| Mercury (7439-97-6) | .05 mg/m <sup>3</sup>        | .05 mg/m <sup>3</sup>          | less than .02        |
| Lead+ (7439-92-1)   | .05mg/m <sup>3</sup>         | less than .1mg/m <sup>3</sup>  | less than 5% by wgt. |

Inert Ingredients: Glass, Quartz, Metal

+ Mainly found in glass bulb and solder

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### SECTION 3: PHYSICAL DATA

This item is a glass light bulb. Chemical characteristics not applicable.

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### SECTION 4: FIRE AND EXPLOSION DATA

Fire and explosion data not applicable. Under extreme heat outer glass envelope might melt or crack. Inner arc tube is composed of polycrystalline alumina and is refractory material.

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## SECTION 5: REACTIVITY DATA

Stability: Lamp is stable.  
Incompatibility: Glass envelope will react with Hydrofluoric Acid.  
Polymerization: Will not occur.

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## SECTION 6: HEALTH HAZARD DATA

Not applicable to 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 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.

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## SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

Normal precautions should be taken for collection of broken glass.

WASTE DISPOSALS METHOD: The arc tube (inner envelope) of a high pressure sodium lamp contains somewhat less mercury than either a mercury vapor or metal halide lamp, together with a small amount of sodium. While sodium can produce heat when placed in contact with water, the amount of sodium contained in a lamp is so small that there is generally no hazard. Under the new Toxicity Characteristic Leachate 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 tests results for fluorescent lamps vary tremendously from laboratory to laboratory and appear to be dependent on lamp operating conditions or burning time. Lamps from all manufacturers exhibit the same phenomena. The National Electrical Manufacturers Association is working closely with the EPA for clarification and guidance.

A toxic characteristic leachate test conducted on based HID lamps for lead could cause the lamp to be classified as a hazardous waste. The lead used in the solder should pose little risk of exposure under normal use and handling.

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## SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: None. Dust mask might be used if large volumes of lamps are being broken for disposal.

VENTILATION: Avoid inhalation of any airborne dust.

HAND & EYE PROTECTION: Appropriate hand and eye protection should be worn when disposing of lamps or handling broken glass.

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