SAFETY DATA SHEET
High Pressure Sodium Lamps

SYLVANIA brand High Pressure Sodium Lamps, manufactured by LEDVANCE, LLC, are exempted from the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are "articles." The following information is provided by LEDVANCE, LLC as a courtesy to its customers.

I. IDENTIFICATION

Trade Name (as labeled): **SYLVANIA HID High Pressure Sodium Lamps:**
This data sheet covers single ended SYLVANIA high pressure sodium lamps for general lighting purposes

Manufacturer:
OSRAM de Mexico S.A. de C.V.
950 Joule Street, Industrial Park
A.J. Bermudes, C.P. 32470
Cd. Juarez, Chihuahua, Mexico

LEDVANCE LLC
200 Ballardvale Street
Wilmington, MA 01887

Emergency Contact: EH&S Specialist 978-570-3000

II. HAZARD IDENTIFCATION



Warning!

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT.

Warning! Operate with compatible ballast and fixture only: This lamp must be operated in a fixture and ballast which has an ANSI designation identical to that found on the lamp outer glass bulb.

Warning! Electrical shock and burn hazard: Do not remove or insert lamp while power is on. If outer glass bulb is broken, shut off power immediately and remove lamp after it has cooled.

Consult the SYLVANIA product catalog or relevant technical data sheets for complete warnings, operating and installation guides for specific lamp types for instructions and fixture requirements that must be complied with to avoid risk of personal injury, property damage and poor lamp performance.

Do not handle until all safety precautions have been read and understood. Care must be taken to read and follow the directions and warnings accompanying the specific product to avoid personal injury and/or property damage.

Storage: N/A.

III. COMPOSITION – INFORMATION ON INGREDIENTS

There are no known health hazards from exposure to lamps that are intact.

Materials listed on this data sheet are contained in varying percentages in this product. Exact percentages are proprietary and will not be disclosed other than as required in accordance with the regulations. If a lamp is broken, some of the following materials may be released:

Chemical Name	CAS Number	% by wt.
(1, 2) Mercury	7439-97-6	<0.05
Aluminum Oxide	1344-28-1	<15
Glass (Borosilicate)	---	50-75
Barium Compounds	7440-39-3	0.02-<0.1
Sodium	7440-23-5	0.003-<0.1

(1) These chemicals are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
(2) The mercury in this product is a substance known to the state of California to cause reproductive toxicity if ingested. [California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).]

***NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards* and/or *NIOSH Pocket Guide to Chemical Hazards* lists the following effects of overexposure to the chemicals/materials tabulated below when they are inhaled, ingested, or contacted with skin or eye:**

- Mercury - Contact, inhalation, or ingestion may cause one or more of the following symptoms: eye irritation, skin irritation, cough, chest pain, dyspnea, bronchitis, pneumonitis, tremor, insomnia, irritability, indecision, headache, fatigue, weakness, stomatitis, salivation, GI tract disturbance, anorexia, weight loss, and proteinuria.

- Glass - Glass dust is considered to physiologically inert and as such has an OSHA exposure limit of 15 mg/M3 for total dust and 5 mg/M3 for respirable dust. The ACGIH TLVs for particulates not otherwise classified are 10 mg/M3 for total dust and 3 mg/M3 for respirable dust.

- Aluminum Oxide (Alumina) - Alumina is a non-toxic material. Sharp-edged particles can irritate the eyes, skin, and respiratory system.

- Barium Compounds – Alkaline barium compounds, such as hydroxide and carbonate, may cause local irritation to the eyes, nose, throat, and skin.

- Sodium – Skin contact can cause thermal and/or alkali burns. Fumes from burning sodium are highly irritating to skin, eyes, and mucous membranes.

All other components of this product do not pose a significant risk of respiratory and/or physical effects.

IV. EMERGENCY AND FIRST AID PROCEDURES:

Glass Cuts: Perform normal first aid procedures. Seek medical attention as required.
Inhalation: If discomfort or irritation to the nose and throat develop, remove from exposure and seek medical attention as needed. If breathing has stopped, perform artificial respiration; keep affected person warm and at rest; get medical attention as soon as possible.
Ingestion: In the unlikely event of ingesting a large quantity of material, seek medical attention immediately.
Contact, Skin: Thoroughly wash affected area with mild soap or detergent and water and prevent further contact. Seek medical attention as needed.
Contact, Eye: Wash eyes, including under eyelids, immediately with copious amounts of water for 15 minutes. Seek medical attention.

V. FIRE-FIGHTING MEASURES:

Flammability: Non-combustible
Fire Extinguishing Materials: Use extinguishing agents suitable for surrounding fire.
Special Firefighting Procedure: Use a self-contained breathing apparatus to prevent inhalation of dust and/or fumes that may be generated from broken lamps during firefighting activities.
Unusual Fire and Explosion Hazards: When exposed to high temperature, toxic fumes may be released from broken lamps.

VI. ACCIDENTAL RELEASE MEASURES:

ONLY APPLICABLE FOR BROKEN LAMPS

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the PEL or TLV limits. If such ventilation is unavailable, use respirators as specified below.
Respiratory protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.
Eye protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken.
Protective clothing: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.
Hygienic practices: After handling broken lamps, wash hands and face thoroughly before eating, drinking, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.

VII. SPECIAL HANDLING INFORMATION - FOR BROKEN LAMPS

ONLY APPLICABLE FOR BROKEN LAMPS

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the PEL or TLV limits. If such ventilation is unavailable, use respirators as specified below.
Respiratory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Eye Protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken. To avoid exposure to ultraviolet radiation, use only in enclosed equipment designed for this lamp type.
Protective Clothing: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.
Hygienic Practices: After handling broken lamps, wash thoroughly before eating, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.
Storage Instructions: Store in well-ventilated place.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Threshold Value Limits (TLV):

Chemical Name	CAS Number	Exposure Limits in Air (mg/cubic m)	
		ACGIH (TLV)	OSHA (PEL)
(1, 2) Mercury	7439-97-6	0.025	0.1 Ceiling
Aluminum Oxide	1344-28-1	10.0 (3)	15.0 (3)
Glass (Borosilicate)	---	10.0 (3)	15.0 (3)
Barium Compounds	7440-39-3	0.5	0.5
Sodium	7440-23-5	---	---

(1) These chemicals are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
(2) The mercury in this product is a substance known to the state of California to cause reproductive toxicity if ingested. [California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).]
(3) Limits as nuisance particulate.

Personal Protective Equiment: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.
Eye Protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken.
Skin Protection: After handling broken lamps, wash hands and face thoroughly before eating, drinking, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.
Respitory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

VIV. PHYSICAL AND CHEMICAL PROPERTIES

NOT APPLICABLE FOR LAMPS

X. STABILITY AND REACTIVITY

NOT APPLICABLE FOR LAMPS

XI. TOXICOLOGICAL INFORMATION

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

XII. ECOLOGICAL INFORMATION

XIII. DISPOSAL CONSIDERATIONS

LEDVANCE, LLC recommends that all mercury-containing lamps be recycled. For a list of lamp recyclers and to obtain state regulatory disposal information, call 1-866-666-6850 or log onto www.lamprecycle.org.

If lamps are broken, ventilate area where breakage occurred. Clean-up with mercury vacuum cleaner or other suitable means that avoids dust and mercury vapor generation. Take usual precautions for collection of broken glass. Place materials in closed containers to avoid generating dust and mercury vapor.

It is the responsibility of the waste generator to ensure proper classification and disposal of waste products. To that end, TCLP tests should be conducted on all waste products, including this one, to determine the ultimate disposition in accordance with applicable federal, state and local regulations.

Lamps that pass the EPA's TCLP test are considered non-hazardous waste in most states. Always review your local and state regulations which can vary. Based upon the NEMA* Standard LL 3 (Procedures for High Intensity Discharge Lamp Sample Preparation and the TCLP) testing protocol, ECOLOGIC® lamps, marked "ECO," pass the TCLP test.

*NEMA (National Electrical Manufacturers Association) standard may be obtained from NEMA, 1300 North 17th Street, Suite 900, Arlington, VA 22209.

XVI. TRANSPORTATION INFORMATION

Domestic (Land, D.O.T.): N/A

International (Water, IMO): N/A

International (Air, IATA & ICAO)

CLASS: Corrosive (8)**
PRODUCT LABEL: OSRAM/SYLVANIA High Pressure Sodium Lamp
UN NUMBER: 3506
PACKING GROUP: III
PROPER SHIPPING NAME: Mercury Contained in manufactured articles, excepted package – Articles

** For Mercury over 1G per article or 30 G per package,

XVII. REGULATORY INFORMATION

Although LEDVANCE, LLC attempts to provide current and accurate information herein, it makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage or injury of any kind which may result from, or arise out of, the use of/or reliance on the information by any person.

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In case of questions please call: EH&S Specialist 978-570-3000

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