

PRODUCT SAFETY DATA SHEET
PSDS No. 1.5.9
METAL HALIDE EL LAMPS
with Integrated Electronic Ballasts



Sylvania brand METAL HALIDE EL Lamps, manufactured by OSRAM SYLVANIA Inc., 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 OSRAM SYLVANIA as a courtesy to its customers.

I. PRODUCT IDENTIFICATION

Trade Name (as labeled):

Sylvania Metalarc® Powerball® EL Ceramic Lamps
Metal Halide Lamps for Industrial & Commercial Lighting)
This data sheet covers the following integrated with electronic ballast ceramic metal halide lamps: MCP24EL/PAR30LN and MCP24EL/PAR38.

Manufacturer:

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

II. HAZARDOUS INGREDIENTS

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. If a lamp is broken, the following materials may be released:

Chemical Name	CAS Number	% by wt.	Exposure Limits in Air (m cubic m)	
			ACGIH (TLV)	OSHA (PEL)
^(1, 2) Mercury	7439-97-6	<0.005	0.025	0.1 Ceiling
Quartz, Fused	60676-86-0	0-5	0.1 Resp. Dust	0.1
Aluminum Oxide	1344-28-1	0.0005-<0.001	10 ⁽³⁾	15 ⁽³⁾
Thallium Iodide	7790-30-9	<0.0005	0.1 Skin	<10.1
Glass (Borosilicate)	----	61-86	10 ⁽³⁾	15 ⁽³⁾
Krypton-85 (<i>used in arc tubes</i>)	7439-90-9	< 10 nCi	---	---

(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) Not listed specifically by substance name. Limits as nuisance dust.

III. PHYSICAL PROPERTIES

Not applicable to intact lamp.

IV. FIRE & EXPLOSION HAZARDS

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.

V. HEALTH HAZARDS

A. OPERATING LAMPS

Consult the OSRAM SYLVANIA Product Catalog or relevant technical data sheets for complete warnings, operating and installation guides for specific lamp types.

THE FOLLOWING INSTRUCTIONS MUST BE COMPLIED WITH TO AVOID RISK OF PERSONAL INJURY, PROPERTY DAMAGE AND POOR LAMP PERFORMANCE.

I. ULTRAVIOLET RADIATION EXPOSURE - WARNING: This lamp can cause serious skin burns and eye inflammation from shortwave ultraviolet radiation if the outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes, unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This product conforms to the following federal regulations: U.S.A.: 21 CFR 1040.30 and CANADA: SOR/80-381.

II. RUPTURE RISKS: This Metal Halide lamp is constructed of an outer glass bulb with an internal arc-tube. Metal Halide arc-tubes operate at high pressure and at very high temperatures and can unexpectedly rupture due to internal causes or external factors such as a ballast failure or misapplication. An arc-tube rupture can burst and shatter the outer glass bulb resulting in the discharge of glass fragments and extremely hot particles. In the event of such rupture. THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.

III. LAMP OPERATING INSTRUCTIONS - CAUTION: TO REDUCE THE RISKS OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS, AND FIRE RESULTING FROM AN ARC TUBE RUPTURE THE FOLLOWING LAMP OPERATING INSTRUCTIONS MUST BE FOLLOWED:

1. Re-lamp fixture at or before the end of rated life. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture. (See catalog for rated life.)
2. Only operate with compatible fixture at 120V input.
3. This lamp is not intended for use with emergency fixtures or emergency exit lights.
4. Do not operate with an external ballast as ballast is integrated into the lamp.
5. Do not use in sockets controlled by a dimmer, electronic timer or photocell.
6. Before lamp installation or replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
7. Do not use lamp if lens, reflector or housing is visibly damaged.
8. Do not use in totally enclosed, recessed fixture.
9. Protect lamp, lamp socket and wiring against moisture, corrosive atmosphere and excessive heat. Lamps should be operated in dry locations only.
10. Time should be allowed for lamp color to stabilize when turned on for the first time. All lamp ratings are based 100 hours of operation. Movement or vibration may cause variation in color and appearance.
11. Lamps may require 10-15 minutes to re-light if there is a loss of power to the socket.
12. Take care in handling and disposing of this lamp. If arc-tube is broken, avoid skin contact with any of the contents and fragments.
13. This product complies with the requirements of FCC 47 CFR 18, non-consumer. This product may cause interference to radios, televisions, wireless telephones and remote controls. If interference occurs, move the product away from these devices or plug into a different outlet. Do not install this near maritime safety communications equipment or other critical navigation or communications equipment operating between 0.45-30 MHz. For additional product information, call 1-800-LIGHTBULB (1-800-544-4828).

IV. NOTES:

1. This lamp is intended for use in open fixtures since it was designed to contain a ruptured arc-tube and thereby minimize the resultant risks of personal injury, property damage, burns, and fire.
2. This lamp contains an arc tube with a fill gas containing less than 10 nCi of Kr-85 and is distributed by OSRAM SYLVANIA Products Inc. 100 Endicott St. Danvers, MA 01923.

B. LAMP MATERIALS

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.

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 - Exposure to high concentrations of vapors for brief periods can cause acute symptoms such as pneumonitis, chest pains, shortness of breath, coughing, gingivitis, salivation and possibly stomatitis. May cause redness and irritation as a result of contact with skin and/or eyes.

Quartz, Fused - Fibrosis of the lungs causing shortness of breath and coughing has been associated with silica exposure.

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

Aluminum Oxide (Alumina) - Alumina is a non-toxic material which is very low in free-silica content. Sharp-edged particles can irritate the eyes, perhaps the skin, and definitely the mucous membranes of the respiratory tract.

Krypton-85 Contained in Arc Tubes - In the unlikely event that an arc tube breaks, the traces of krypton-85 gas immediately disperses in the air. Krypton gas and its radioactive isotope are inert (they do not react chemically with other substances) and are not absorbed by the body.

C. EMERGENCY AND FIRST AID PROCEDURES

Glass Cuts: Perform normal first aid procedures. Seek medical attention as required.

Inhalation: If discomfort, irritation or symptoms of pulmonary involvement develop, remove from exposure and seek medical attention.

Ingestion: Seek medical attention.

Contact, Skin: Thoroughly wash affected area with mild soap or detergent and water and prevent further contact. Seek medical attention if irritation occurs.

Contact, Eye: Wash eyes, including under eyelids, immediately with copious amounts of water for 15 minutes. Seek medical attention.

CARCINOGENIC ASSESSMENT (NTP ANNUAL REPORT, IARC MONOGRAPHS, OTHER): None

V. REACTIVITY DATA

Stability: Stable

Conditions to avoid: None for intact lamps.

Incompatibility (materials to avoid): None for intact lamps.

Hazardous Decomposition Products (including combustion products): None for intact lamps.

Hazardous Polymerization Products: Will not occur.

VI. PROCEDURES FOR DISPOSAL OF LAMPS

OSRAM SYLVANIA 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 which 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, MCP24EL/PAR30LN and MCP24EL/PAR38 lamps pass the TCLP test.

VIII. SPECIAL HANDLING INFORMATION - 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. In the event an outer jacket is broken, the lamp should be shut off immediately and replaced to avoid exposure to ultraviolet radiation.

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.

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Issue Date: [May 02, 2011](#) (B)

In case of questions, please call:

Supersedes: October 3, 2008 (A)

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