LAMP MATERIAL INFORMATION SHEET
HIGH PRESSURE SODIUM LAMPS

MATERIAL SAFETY DATA SHEET (MSDS)
Information and Applicability

The Material Safety Data Sheet (MSDS) requirements of the Occupational Safety and Health Administration (OSHA) for chemicals are **not** applicable to manufactured articles such as lamps. No material contained in a lamp is released during normal use and operation.

The following information is provided as a service to our customers. This Lamp Material Information Sheet contains the Material Safety Data Sheet information that is applicable.

SECTION 1: PRODUCT IDENTIFICATION

Trade Name: SATCO HYGRADE

- This data sheet covers all SATCO HYGRADE brand High Pressure Sodium lamps for general lighting applications.

SATCO Products, Inc.
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Brentwood, NY 11717

Phone: (800) 437-2826 or (631) 243-2022

SECTION 2: LAMP MATERIALS AND HAZARDOUS INGREDIENTS

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

	Chemical Name	CAS Numbers	% by Wt.	Exposure Limits in Air (mg/m^3)	
				ACGIH(TLV)	OSHA (PEL)
(1)	Barium Compounds (as EA)	7440-39-3	0.0023	<0.5	<0.05
(1.2)	Lead Solder (as Pb)	7439-92-1	<0.72	<0.15	<0.05
	Sodium	7440-23-5	<0.003	-----	---
(1)	Mercury	7439-97-6	<0.013	<0.025	<0.1
(1.2)	Glass (Lead Borosilicate)	---	<66.2	<10 (3)	<15 (3)
(1.2)	Glass (Lead Oxide, %6)	1317-36-8	---	<0.15	<0.05
	Aluminum Oxide	1344-28-1	<9.9	<10 (3)	<15 (3)

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

SECTION 3: PHYSICAL/CHEMICAL PROPERTIES

Not Applicable to Intact lamp.

SECTION 4: FIRE AND EXPLOSION HAZARDS

Not applicable. Under extreme high temperatures, the glass might melt or crack.

SECTION 5: REACTIVITY DATA

Stability: Lamp is stable.
Incompatibility: None for intact lamp.
Hazardous Polymerization: Will not occur..

SECTION 6: HEALTH HAZARDS

EXPOSURE TO INTACT LAMPS DOES NOT POSE ANY KNOWN HEALTH HAZARDS. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged for frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

EFFECTS OF OVEREXPOSURE TO BROKEN LAMPS BY INHALATION, INGESTION, OR CONTACT (SKIN OR EYE):

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

Lead – Ingestion and inhalation of lead dust or fume must be avoided. Irritation of the eyes and respiratory tract may occur. Excessive lead absorption is toxic and may include symptoms such as anemia, weakness, abdominal pain, and kidney disease. However, the chemical inertness and insolubility of this material is expected to reduce the potential for systemic lead toxicity.

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

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 possible stomatitis. May cause redness and irritation as a result of contact with skin and/or eyes.

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.

Aluminum Oxide – 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.

EMERGENCY FIRST AID:

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: 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 amount of water for 15 minutes. Seek medical attention.

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

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

If lamps are broken, ventilate area where breakage occurred. Clean-up by vacuuming or other method that avoids dust generation. Take usual precautions for collection of broken glass. Place materials in closed containers to avoid generating dust.

It is the responsibility of the waste generator to ensure proper classification 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.

SECTION 8: CONTROL MEASURES

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 for dealing with broken lamps.
Protective clothing: OSHA specified gloves are recommended for dealing with broken lamps.
Hygienic practices: After handling broken lamps, wash hands thoroughly before eating, smoking or using toilet facilities.