



SAFETY DATA SHEET

LOW & MEDIUM PRESSURE MERCURY VAPOR LAMPS

The low pressure mercury vapor lamps manufactured by Jelight Company, Inc. are exempted from the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are categorized as 'Articles'. The following information is provided by Jelight Company, Inc. as a courtesy to its customers.

Section 1 : PRODUCT IDENTIFICATION

Trade Name (as labeled) - Low/Medium Pressure Mercury Vapor Lamp (Ultraviolet Lamp)

Manufacturer JELIGHT COMPANY, INC.
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Section 2 : HAZARDS IDENTIFICATION

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

UV radiation - UV exposure to eye or skin may causes UV burns during operating condition unless properly protected.

Ozone – UV lamp generates small amount of ozone during operating condition. Inhalation protection is required.

* Following materials may be released if broken:

Mercury - Mercury is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Quartz – Lamp vessel is quartz glass that may leave splinter if broken.

Section 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	% by Weight
Mercury (Hg)	7439-97-6	< 2.5
Quartz (SiO ₂ – Silica)	60676-86-0	< 90

Section 4 : FIRST-AID MEASURES

*During lamp operation:

UV Radiation – Severe UV burns from exposure of UV light should be treated by a physician.

Ozone Inhalation – Supply with fresh air for breathing if inhaled significant amount of ozone.

*Broken lamp with mercury release:

Skin Contact – Wash immediately with plenty of water if skin is exposed to mercury.

Eye Contact - Rinse immediately with plenty of water if eye(s) is exposed to mercury.

Ingestion - Drink plenty of water if ingested mercury. Seek medical attention immediately.

Glass cut – Normal first aid. Severe cuts should be treated by a physician.

Section 5 : FIRE-FIGHTING MEASURES

Flammability - Non-combustible

Fire Extinguishing - Use extinguishing agents suitable for surrounding fire. If exposed to extreme heat the plastic and glass components may crack or melt and may release toxic fumes.

Section 6 : ACCIDENTAL RELEASE MEASURES

Breakage of lamps may result in release of mercury. Provide sufficient ventilation and avoid mercury contact. Balls of mercury can be picked up by special vacuum pump mercury clean up kit or mercury absorbent and dispose in accordance with local, state, and federal laws & regulations.

Section 7 : Handling and Storage

Handling – Avoid breakage from mechanical stress and impact

Storage – Store within original package



SAFETY DATA SHEET

Section 8 : Exposure controls / Personal Protection

Exposure Limits:

Chemical Name	OSHA (PEL)	NIOSH (REL)	ACGIH (TLV)
Mercury (Hg)	0.1 mg/m ³ (Ceiling)	0.05 mg/m ³ (Skin)	0.025 mg/m ³ (Skin)
Quartz (SiO ₂) (*Respirable fraction)	0.1 mg/m ³ (TWA)	0.05 mg/m ³ (TWA)	0.025 mg/m ³
Ozone (O ₃)	0.1 ppm (0.2 mg/m ³) (TWA)	0.1 ppm (0.2 mg/m ³) (Ceiling)	0.1 ppm (0.2 mg/m ³) Light Work 8 hr. (TWA)

Personal Protection:

Follow manufacturer's instruction for installation of lamp. Operators must be trained to fully understand the recommended operating and safety procedures. Safety glasses with side shield protection against ultraviolet light must be worn for person protection. Ozone generated by the process must be properly exhausted.

Section 9 : Physical and chemical properties

(Mercury inside emitter)

Physical form – Liquid

Color – Silver

Odor – Odorless

Boiling point – No Data

Flash point – N/A

Ignition point – N/A

Explosion limit – N/A

Viscosity – No Data

Solubility in water – Insoluble

Section 10 : Stability and reactivity

Stable and non-reactive under normal condition. Avoid mechanical impact or stress that may cause broken glass vessel and release mercury.

Section 11 : Toxicological information

Acute toxicity – N/A

Chronic toxicity - Inhalation of mercury vapor from broken lamp for a longer period of time can damage the central nerve system. (*See Section 8 for permissible limit)

Section 12 : Ecological information

Ecotoxicity – Mercury is harmful to aquatic organisms and may cause long-term adverse effect in the aquatic environment.

Section 13 : Disposal consideration

End of life or damaged/broken lamp must be disposed properly in accordance with local, state, and federal laws and other regional regulations. Waste is classified as 'Universal Waste' in the U.S. and EU for code 200121 'Fluorescent tubes and other mercury-containing waste.' For disposal or recycle, please visit www.epa.gov/bulbrecycling, www.lamprecycle.org or contact Jelight Company, Inc. at www.jelight.com for detail.

Section 14 : Transportation information

Land transportation – Not dangerous (Hg mass <1 kg per lamp)

Ocean transportation – Not dangerous (Hg mass <1 kg per lamp)

Air transportation (IATA/ICAO) – Not dangerous (Hg mass <100mg per lamp)

Section 15 : Regulatory information

(Regulations for Mercury)

U.S. Federal – EPA TSCA, SARA

EU – EEC inventory EINECS

Section 16 : Other information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

SDS prepared by Jelight Company, Inc., Irvine, California, U.S.A.