

## Material Safety Data Sheet

Issue Date : 1<sup>st</sup> May 2012

### **Low Pressure Mercury Lamps (Ultraviolet Lamps)**

#### **1. Identification of Product & Company**

##### **Identification of substance or preparation**

Low Pressure Mercury Lamp (Ultraviolet Lamps)

**Synonyms:** Ultraviolet Lamp, UV Lamp

##### **Product Application**

Altus Science Part Number	Product Name
A-3450-UVL	Sievers Replacement UV Lamp – Model 400ES ,420 & 2244OL
A-3550-UVL	Sievers Replacement UV Lamp – Model 500
A-2100-UVL	Sievers Replacement UV Lamp – Model 900
A-2101-UVL	Sievers Replacement UV Lamp – Model 800
A-4090-UVL	Anatel Replacement UV Lamp – A643a
A-4790-UVL	Anatel Replacement UV Lamp – PAT700

##### **Company/Undertaking Identification**

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#### **2. Composition/Information on Ingredients**

Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation

The mercury lamps are exempted from the requirements of OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are categorized as “Articles”.

The following information is provided by Altus Science as a courtesy to its customers.

Use only as directed and in accordance with good lab practices

### 3. Hazards Identification

Compound Name	CASRN	EC Number	% by Weight	Exposure Limits ACGIH (TLV) (mg/m <sup>3</sup> )	Exposure Limits OSHA (PEL) (mg/m <sup>3</sup> )	Hazard Label
Quartz (Silica)	60676-86-0	262-373-8	-80	0.8	0.1	NA
Mercury (Hg)	7439-97-6	N/A	<0.05>	0.025	0.1 Ceiling	NA

Notes: THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMP MATERIALS THAT ARE INTACT. If the lamp is broken, the above materials may be released. 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.

Material Use: Used in instrumentation. Uses also include research and development.

### 4. First Aid Measures

#### Emergency Overview

This product is NON Combustible.

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.

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

Eye Contact: Flush the eyes with Isotonic eyewash solution or with tap water until medical help can arrive. **DO NOT DISCONTINUE FLUSHING THE EYES UNTIL DIRECTED TO DO SO BY MEDICAL PERSONNEL.**

Skin Contact: Remove contaminated clothing. Wash contacted skin immediately with running water and soap for at least 15 minutes.

Ingestion: No adverse effects anticipated since this material is insoluble and non-toxic.

### 5. Fire Fighting Measures

Flash Point	Ignition Temperature	L.E.L	U.E.L
Will Not Flash	Will Not Flash	NA	NA

Flammable Properties: Not Flammable, Non-Combustible

Extinguishing Media: Dry chemical, carbon dioxide or appropriate foam as suitable for surrounding fire.

Hazardous Decomposition Products: When heated to thermal decomposition may give off toxic fumes from broken lamp.

Flash Point: Will not flash.

### 6. Accidental Release Measures

If lamps are broken, ventilate area where breakage occurred. Clean up with mercury vacuum cleaner or other suitable means that avoid dust and mercury vapour generation. Take usual precautions for collection of broken quartz. Clean up requires special care due to mercury droplet proliferation. Place materials in closed containers to avoid generation of dust. Dispose in accordance with applicable federal, state, and local regulations.

### 7. Handling & Storage

Handle in accordance with good laboratory practices. Store in a dry well-ventilated place. This product is intended for use only by people trained in the safety and handling of chemicals and laboratory preparations.

### 8. Exposure Controls/Personal Protection

Handle in accordance with good laboratory practices. Wash thoroughly after handling.

Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.

Eye Protection: Safety glasses with side shields or safety goggles

Skin Protection: Neoprene or other chemical resistant gloves.

Engineering Controls: Not normally needed. If exposure limits are exceeded, work in a fume hood.

### 9. Physical & Chemical Properties

Not applicable to intact lamp.

## 10. Stability & Reactivity

Hazardous Polymerization Will Not Occur  May Occur  Stability: Stable   
Unstable  Hazardous Decomposition/Combustion Products: NA  
Conditions and Materials to Avoid: Dissolves in hydrofluoric acid

## 11. Toxicological Information

Primary Route(s) of Exposure Under Normal Use: NA Target  
Organ(s): NA

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

Chronic Effects: Exposure to high concentrations of mercury vapours for brief periods can cause symptoms such as tremors and neuropsychiatric problems. Chronic excessive exposures to fused silica dust may produce lung injury. This is fused silica and is not to be confused with crystalline silica which is listed by IARC as possible human carcinogen. The status of fused silica has not been determined.

Other Information: Chemical Ingredient(s) not classified as carcinogen(s) by OSHA, IARC, NTP, ACGIH, or California.

## 12. Ecological Information

No information available on this preparation or mixture. By complying with sections 6 & 7 there will be no release into the environment.

Aquatic Toxicology: No Data Available.

Biodegradation: No Data Available.

## 13. Disposal Considerations

To determine proper disposal, consult applicable federal, state and local environmental control regulations.

### 14. Transport Information

Shipment Name/Type: Non-hazardous for transport.

UN Number: NA

Shipping/Hazardous Class: NA

Packing Group: NA

Shipping regulations are based on combinations of criteria such as quantity, class and packaging according to DOT, IATA and (49) CFR.

### 15. Regulatory Information

EU Symbol of Danger: NA

EU Risk Phrases: NA

U.S. TSCA: Listed

Canada: This product has been classified according to the hazard criteria of the CPR and this MSDS contains all the information required by the CPR.

### 16. Other Information

United States EPA Regulatory Information:

CERCLA RQ: NA

HMIS Rating:

NFPA Rating: Health: NA SARA 313: NA

Health: NA

Flammability: NA

Flammability: NA

Reactivity: NA

Physical Hazard: NA

**NOTE:** NA = Data not available, not established, determined or not pertinent.

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