MERCURY UV BULBS DATE OF PREP: 3/1/03

# SECTION 1 - IDENTIFICATION OF SUBSTANCE AND COMPANY

Product Name: UV Bulbs

Chemical Name: Intact Sealed Article, Mercury; Metallic Mercury; Quicksilver

Distributor: UV PROCESS SUPPLY Address: 1229 W. CORTLAND

CHICAGO, IL 60614-4805

**Telephone #:** 773-248-0099

**Emergency Phone Numbers:** 800-321-2881

800-424-9300

### **SECTION 2 - INFORMATION ON INGREDIENTS**

### Hazardous and regulated components \*

<u>CAS</u> <u>Wt</u> <u>Component</u> <u>Exposure Limits</u>

14808-60-7 Quartz glass N.A.

7439-97-6 .5 - 2gm Mercury (Vapor) .05 mg/m³ TWA

Ultraviolet radiation - 8 hour TWA is .1 microwatt per centimeter squared.

UV bulbs are sealed articles and are exempt from the HazCom requirement of OSHA.

#### SECTION 3 - HAZARDS IDENTIFICATION

### **Effects of Overexposure:**

**EYES:** Conjunctivitis from overexposure to the light source; eye irritation from inhalation of ozone.

**SKIN:** Erythema (sunburn) which may be exaggerated with the use of sensitizing pharmaceutical and herbal products.

**INHALATION:** none from bulb; inhalation of ozone may irritate the nose or cause headache and nausea.

**ORAL:** none from bulb; inhalation of ozone may irritate the throat.

#### **SECTION 4 - FIRST AID MEASURES**

**Skin:** conjunctivitis

**Eyes:** welders flash treatment

**Inhalation:** No first aid should be needed due to ultraviolet exposure. **Ingestion:** No first aid should be needed due to ultraviolet exposure.

**Comments:** Additional hazards may be created from exposure to the coating.

Effects of overexposure to skin and eyes usually disappear in 48 hours. Some individuals may have an abnormally increased sensitivity to the effects of UV light. This may be the result of a sensitizing chemical or prescribed drug.

1

MERCURY UV BULBS DATE OF PREP: 3/1/03

Sensitization will result in an exaggerated sunburn response. Further occupational exposure to UV should be limited and the individual should be referred to a physician.

# SECTION 5 - EXPLOSION AND FIRE FIGHTING MEASURES

Flash Point: NA

Extinguishing Media: NA

Special Fire Fighting Procedures: NA

Unusual and Explosion Hazards: None known

Hazardous Decomposition Products: None known

### SECTION 6 - ACCIDENTAL RELEASE / SPILL PROCEDURES

Steps to be taken in case material is released or spilled:

Broken bulbs should be placed in a sealed container and handled/disposed as hazardous waste.

### SECTION 7 - HANDLING AND STORAGE

**Handling:** A small amount of mercury is contained in the quartz tube of UV lamps. Due to the toxicity of mercury, bulbs should be handled so that breakage is minimized.

Storage: Scrap bulbs may be stored for one year before being shipped for recycling.

#### SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Install bulbs following manufacturer's guidance. Operators should be trained to fully understand the recommended operating and safety procedures. Ozone generated by the process requires negative pressure exhaust.

#### **Personal Protective Equipment for Routine Handling:**

Safety glasses with side shield with protection against ultraviolet light. Contact lenses should not be worn. Barrier creams or polyethylene skin protection are recommended. Industrial processes must be evaluated for additional safeguards.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical form: solid

Color: clear Odor: none

Specific Gravity @25C: n/a

Viscosity: n/a

Freezing/Melting Point: n/a

Boiling Point: n/a

Vapor Pressure @25C: n/a

MERCURY UV BULBS DATE OF PREP: 3/1/03

Solubility in Water: insoluble

PH: n/a

Volatile content: n/a

Note: Bulb surfaces are hot.

# **SECTION 10 - STABILITY AND REACTIVITY**

Stability: Bulbs are stable

Conditions to avoid: Photosensitizing agents Hazardous Polymerization: Will not occur.

Incompatible materials: None

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

#### **Acute Toxicology Data for Product:**

No data available.

#### SECTION 12 - ECOLOGICAL INFORMATION

#### **Environmental Fate and Distribution:**

No data available.

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

#### **Waste Disposal Methods:**

Used bulbs should be handled/disposed in accordance with federal, state, and local regulations. Bulbs may be returned to UV Process Supply for recycling.

#### **RCRA / Universal Waste:**

Bulbs that are not recycled must be handled/disposed in accordance with RCRA regulations. Each state has specific regulations that apply to the management of spent bulbs. Bulb recycling must be in accordance with the Universal Waste rule.

#### **SECTION 14 - TRANSPORTATION INFORMATION**

**DOT Shipping Name - Not Regulated** 

## **SECTION 15 - REGULATORY INFORMATION**

#### EPA:

RCRA / Universal Waste - bulbs that are to be recycled should be placed in the original container or packaged to prevent breakage. The outer container should be dated and marked "Universal Waste"

3

MERCURY UV BULBS DATE OF PREP: 3/1/03

#### OSHA:

Ultraviolet exposure is limited to 1 milliwatt per centimeter squared. Ozone exposure is regulated at 0.1 parts per million (ppm).

# **SECTION 16 - OTHER INFORMATION**

Photosensitizing

# NOTICE

Information contained herein has been obtained from recognized technical sources. Compliance with all federal, state, and local laws and regulations remains the responsibility of the user.