SAFETY DATA SHEET (SDS)

Manufactured fluorescent lamps are exempt from the requirements of OSHA Hazard Communication Standard 29CFR1910.1200. Defined as manufactured "articles," and individual would not be subject to the materials contained inside during normal intended use. UV RESOURCES provides this Safety Data Sheet as a courtesy to its customers to provide relevant information in the event the article it covers encounters abnormal or unintended circumstances.

I. PRODUCT IDENTIFICATION

Product Name: GTD, GTS & EGTS and RGTS Series Quartz Germicidal Lamps
Manufacturer: UV RESOURCES
25060 AVE STANFORD STE 160
VALENCIA, CA 91355
Phone: (877) 884-4822

II. HAZARDOUS IDENTIFICATION

Product Hazards: There are no known health hazards from exposure to intact, un-energized lamps.
Other Hazards: See sections 9, 11 and 12.

III. COMPOSITION

Ingredients and Exposure Limits:
There are no known health hazards from exposure to intact, un-energized lamps. If a lamp is broken, the following materials may be released:

Chemical Name	CAS-Number	% by Weight	Exposure Limits in Air (mg/meter^3)	
			ACGIH (TLV)	OSHA (PEL)
Quartz (Fused Silica)	60676-86-0	75-90	0.1 **	0.1**
Mercury*	7439-97-6	<.01	0.05	0.05
Tin	7440-31-5	0-<1	2.0	2.0
Lead	7439-92-1	0-<1	0.5	0.05

*This chemical is 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.
**When quartz tubing is heated to vacuum seal temperatures (during manufacturing process), the silica vapors give off condensate as amorphous silica. Amorphous silica has a TLV of 10mg/m^3 and PEL of 6mg/m^3.

IV. FIRST AID MEASURES

First aid: None applicable to intact lamps.
Other: See sections 8 and 11.

V. FIRE FIGHTING MEASURES

Combustibility: Non-combustible
Extinguishing Agents: Use an extinguishing media that is suitable for surrounding the fire such as extinguishing powder, foam, or water.
Special Fire Hazards: When exposed to high temperatures, toxic vapors may be released from broken lamps.

Firefighting Hazards: Use a self-contained breathing apparatus to prevent the inhalation of dust and/or fumes that may be generated from broken lamps during firefighting activities.

Post Fire: All contaminated extinguishing media must be contained and disposed of in accordance with federal, state, and local requirements.

VI. ACCIDENTAL RELEASE MEASURES

Incidental Breakage:

Incidental breakage of a lamp may result in exposure to elemental mercury. No adverse effects are expected. Prolonged or frequent exposure should be avoided using adequate ventilation when disposing of large quantities of lamps.

Method for Cleaning Up a Broken Lamp:

If lamps are broken, ventilate the area where the breakage occurred. Take the usual precautions for collecting broken glass. Clean up with a mercury vacuum cleaner or with other suitable means that avoids dust and mercury vapor generation. DO NOT USE A STANDARD VACUUM CLEANER. Place the collected materials in a closed container to avoid generating dust. Additional guidance on cleaning up broken lamps may be obtained at: Cleaning Up a Broken CFL | US EPA. (https://www.epa.gov/mercury/cleaning-broken-cfl)

Personal Precautions and Protective Equipment:

Use personal protective clothing under adequate ventilation to maintain exposure levels below the OSHA PEL or TLV limits. After handling broken lamps, remove protective clothing and thoroughly wash hands before eating, smoking, or using toilet facilities. Normal precautions should be taken for collecting broken glass.

Environmental Precautions:

Dispose of spent and broken lamps in accordance with all applicable federal, state, and local requirements. Additional guidance on the disposal of fluorescent lamps may be obtained at: http://www.lamprecycle.org.

Reference to Other Sections: See sections 7, 8 and 13.

VII. HANDLING AND STORAGE

Precautions for Safe Handling and Storage:

Use proper personal protection equipment to protect hands and eyes when installing and removing intact lamps. Keep lamps packaged in a closed and labeled container. Store in a cool, well-ventilated area away from direct sunlight, heat, and source of ignition.

Storage Incompatibility and Special Requirements: None for intact lamps.

VIII. EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limit Values: See section 3

Occupational exposure controls:

Use adequate ventilation and other engineering controls to maintain exposure levels below the PEL limits. If proper ventilation is unavailable, use only NIOSH approved respirators in airborne dust concentrations that exceed the exposure limits.

Personal protective equipment:

Use OSHA recommended safety glasses, goggles, or face shields when handling broken lamps. Protect hands and skin by use of appropriate protective gloves and outerwear. Use only NIOSH approved respirators when airborne dust concentrations exceed the exposure limits.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties: Not applicable to an intact lamp.

X. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions.
Chemical Stability: Stable under normal conditions.
Hazardous Reactions: None for intact lamps.
Materials to Avoid: None for intact lamps.
Hazardous Decomposition of Products: Hazardous decomposition of an intact lamp will not occur.

XI. TOXILOGICAL INFORMATION

Toxic Effects:

There are no known health hazards from exposure to intact, un-energized lamps. No adverse effects are expected from the occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation.

Toxic Effects of Overexposure to Broken Lamps by Inhalation, Ingestion, or Contact with Skin or Eye:

Mercury: Exposure to high concentrations of mercury vapors for brief periods can cause acute symptoms such as pneumonitis (inflammation, of lung tissue), chest pains, shortness of breath, coughing, gingivitis, salivation, and possibly stomatitis (inflammation of the mouth and lips). Chronic exposure may cause tremors and neuropsychiatric problems. Contact with the skin or eyes may result in redness to the exposed areas.

Inert Gas: Inert gases can cause asphyxia by displacing oxygen. Some symptoms of asphyxia are headache and dizziness.

Quartz Glass: Glass lacerations are the primary potential hazard of this product. The dust produced in cutting or grinding glass, when higher than OHSA TVL and PEL limits, may result in respiratory irritation and possible lung disease (silicosis). Symptoms include coughing, wheezing, and respiratory distress.

Tin: Although not considered toxic, excessive exposure can cause fever, nausea, stomach cramps or diarrhea. The chemical inertness and insolubility of this material is expected to reduce the potential for synthetic lead and toxicity as noted above.

XII. ECOLOGICAL INFORMATION

Ecological Release: Do not release to public or private sewer, surface water or ground water.

XIII. DISPOSAL CONSIDERATIONS

Waste Management: It is the responsibility of the generator to ensure proper classification and ultimate disposition of all waste products. Dispose of spent and broken lamps in accordance with all applicable federal, state, and local requirements.

XIV. TRANSPORT INFORMATION

As a Product: As a product, mercury-containing lamps, when shipped in the manufacturer's original packaging are not regulated by air, truck, or ocean shipment.

As a Waste: As a waste, mercury-containing lamps may be regulated in various states and local communities. This safety data sheet does not constitute "knowledge of waste" in all jurisdictions. Dispose of spent and broken lamps in accordance with all applicable, federal, and local requirements.

XV. REGULATORY INFORMATION

(RESERVED)

XVI. OTHER INFORMATION

Date of Revision	Revision Number	Changes
11/03/2021	A	Original Document
03/25/2025	B	Updated notes

This Safety Data Sheet had been prepared based on information provided by the manufacturer. Although UV RESOURCES attempts to provide current and accurate information herein, it makes no representative actions regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, or injury of any kind which may result from, or rise out of the use or reliance on the information of this Safety Data Sheet.