

Glo Germ™ Company
PO Box 537 Moab,
Utah 84532

Safety Data Sheet (SDS)

Revised July 3, 2018

Section 1: Identification

GLO GERM™

18" 15 WATT UV-A BLACKLIGHT FLUORESCENT FIXTURE

Emergency & Information Telephone Numbers
1-800-842-6622 Glo Germ™ M-F 9 am -5 pm MST 1101
South Murphy Lane, Moab UT 84532

PLEASE NOTE: The Safety Data Sheet (SDS) 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. The following contains applicable Safety Data Sheet information in the event of lamp tube breakage as well as disposal requirements.

Recommended use: Training aid used to illuminate the Fluorescent Glo Germ particles as used in hand washing, cross-contamination avoidance and surface cleaning effectiveness specifically to avoid transmission/spread of microbes. For external use only. Do not shine into eyes. Always avoid contact with eyes.

Section 2: Hazard(s) Identification

No hazardous ingredients present in intact product.

Health Rating: 0

Flammability Rating: 0 **Reactivity**

Rating: 0

HMIS Rating Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe;

N = No information provided by manufacturer; * = Chronic Health Hazard

Section 3: Composition/Information on Ingredients

No material contained in a lamp is released during normal use and operation. The following information is provided as a service to our customers. The following contains applicable information in the event of glass tube breakage.

Glass & Metal

The glass tube used in a standard fluorescent lamp is manufactured from soda-lime glass and is essentially similar but not identical to that used throughout the glass industry for bottles and other common consumer items. The end-caps on the lamp are generally aluminum while the wires in the lamps (called filaments or cathodes) are made of tungsten. None of these materials would present a potential hazard in the event of breakage of the lamp, aside from the obvious ones due to broken glass. Some fluorescent lamps use an external coating of polycarbonate to provide a shatter-resistant coating.

Phosphor

The fluorescent product line uses two different phosphor systems. One phosphor system (halophosphate) uses calcium chloro-fluoro-phosphate, with small amounts (less than 1-2% by weight the phosphor) of antimony and manganese, both of which are tightly bound in the phosphor matrix. The second phosphor system (SP/SPX) uses a mixture of rare earth elements such as lanthanum, and yttrium as either an oxide or as a phosphate, along with a barium/aluminum oxide. These phosphors produce better lamp efficiency and color rendition. The phosphor components may vary slightly depending on the color of the lamp (cool white, warm white, etc.). Also, in some lamps designed for reduced power consumption, a thin coating of tin oxide is placed on the inside of the glass prior to coating the glass with the phosphor. Normally a 1.5 inch diameter (T12) fluorescent lamp has approximately 1 - 1.25 grams of the phosphor per foot of lamp. A standard four-foot lamp has about 4 - 5 grams of the phosphor coating its inside length. The one-inch diameter (T8) lamp would have proportionally less phosphor due to its smaller size.

Mercury

Mercury is present in small amounts in all fluorescent lamps. The amount of mercury present in any given lamp will vary depending on both the size of the lamp and the design life of the lamp. Smaller, shorter life lamps generally have lower mercury content.

Section 4: First-Aid Measures

First aid measures would not be applicable for normal use. In the event of lamp tube breakage see below:

Eye contact: Wear appropriate eye protection when cleaning up and disposing of broken lamp tube and contents.

Skin contact: Wear thick impregnable gloves when cleaning up and disposing of broken lamp tubes and contents to protect skin from glass and metal cuts as well as contact with chemicals listed in Section 3 above.

Inhalation: Wear appropriate small particulate filtering mask while cleaning up and disposing of broken lamp tube and contents.

Medical Conditions: No known exacerbations to medical conditions.

Section 5: Fire-Fighting Measures

Flammability Class NA

Flash Point: None

Explosive Range: None

Flammable Limits: Unknown

LEL: Unknown **UEL:** Unknown

Extinguishing Media: Use dry chemical, alcohol foam, carbon dioxide or water spray when fighting fires involving this product.

Fire Fighting Instructions: Keep unnecessary people away. Isolate area. Stay upwind. Wear self-contained breathing apparatus.

Special Fire Fighting Procedures: No special firefighting procedures are indicated.

Unusual Fire and Explosion Hazards: None

Section 6: Accidental Release Measures

This product is not defined as a hazardous waste under EPA 40 CFR 261.

Section 7: Handling and Storage

Handling: Use care when handling to avoid breaking the lamp tube.

Storage: Take steps to safeguard the glass lamp tube from breakage.

Section 8: Exposure Controls/Personal Protection

Eye protection: Not required for normal use. **Please Note:** Individuals sensitive to UV light, taking photosensitizing medications, or those who lack optic lenses or who may have other abnormal eye conditions may not be adequately protected against exposure to artificial UV light and should avoid it altogether.

Long-wave, **UV-A**, ultraviolet light, with wavelengths ranging from **400 – 315 nm**, is harmless to skin and eyes. It causes no changes in the body and requires no protective precautions in normal use as recommended by the Glo Germ Company.

UV-A long-wave light within the range outlined above is relatively safe. However, prolonged exposure of the black light to the eyes may cause eye irritation. Symptoms, which can include tearing of the eyes, a burning or painful sensation in the eyes, sensitivity to light, or a sensation like that experienced when a foreign object is lodged in the eye, may not be present until several hours after exposure. To reduce likelihood of experiencing adverse symptoms, individuals should properly shield themselves and use the black lights only as directed. The above assumes a healthy eye and no corrective lenses. Therefore, the Glo Germ Company recommends that the lamp never be held within 6 inches of the eyes and do not look into the lamp tube at close range longer than three minutes. This lamp should be used under adult supervision.

Exposure to UV lights should be limited. Black lights should not be tampered with, nor should their shields or lenses be removed. The Glo Germ Company uses black lights to detect "simulated" germs on hands and surfaces. Therefore, hands and surfaces only should be exposed to the light. Individuals should not look directly at the black light.

Short-wave, **UV-B**, ultraviolet light, with wavelengths ranging from **315 – 280 nm**, does cause chemical changes in the body, such as the formation of vitamin D. With prolonged exposure, reddening of the skin and inflammation of the eyes may occur. While these are uncomfortable effects, they are temporary and no permanent damage will result. Ordinary glass or plastic will completely filter out short-wave ultraviolet light. The Glo Germ Company does **not** offer UV-B lights, only safe UV-A.

Ultra Shortwave, **UV-C** radiation has been known to cause blindness, 'blind spots' in the eyes, sun-burning of the skin, and skin cancer. For these reasons, Glo-Germ does **not** sell or offer short-wave, UV-C, lights. These lamps are used to disinfect objects, to sterilize water or other liquids, in special laboratory applications, and is the main ultraviolet wave length from the Sun and welder torches. The wavelength ranges from **280 – 100 nm**. The Glo Germ Company offers only safe UV-A.

Skin protection: Not required for normal use. **Please Note:** Individuals sensitive to UV light, taking photosensitizing medications, or those who lack optic lenses or who may have other abnormal eye conditions may not be adequately protected against exposure to artificial UV light and should avoid it altogether.

Respiratory protection: Not applicable

Ventilation: Not applicable

Section 9: Physical and Chemical Properties

Not applicable to product as material is stable, non-reactive and not a fire hazard the following have not been evaluated further: Auto-ignition temperature, Flammability (solid, gas), Upper/lower flammability or explosive limits, Decomposition temperature, and Viscosity, Upper/lower flammability or explosive limits, Vapor pressure.

Section 10: Stability and Reactivity

Stable or Unstable: Stable

Conditions to avoid: Heat, sparks, and open flame

Incompatibility (materials to avoid): Strong Oxidizers

Hazardous Polymerization: Will Not Occur

Section 11: Toxicological Information

No material contained in a lamp is released during normal use and operation. We have not carried out any animal testing, therefore we have no Toxicological Data specifically for this product.

In the event of lamp tube breakage see Sections 3, 4 or 8 as applicable.

Section 12: Ecological Information* (non-mandatory)

Ecotoxicity: Not regarded as dangerous for the environment when disposed of properly.

Section 13: Disposal Considerations* (non-mandatory)

Dispose of in accordance with local, state, and federal regulations. To check state regulations or to locate a recycler, go to www.lamprecycle.org.

Section 14: Transport Information* (non-mandatory)

Not regulated.

Section 15: Regulatory Information* (non-mandatory)

PROP 65 Warning: Handling the coated electrical wires of this product exposes you to lead, a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after use.

Section 16: Other Information

Most Recent Revision July 3, 2018

Disclaimer: The information contained herein is accurate to the best of our knowledge. Glo Germ™ Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).