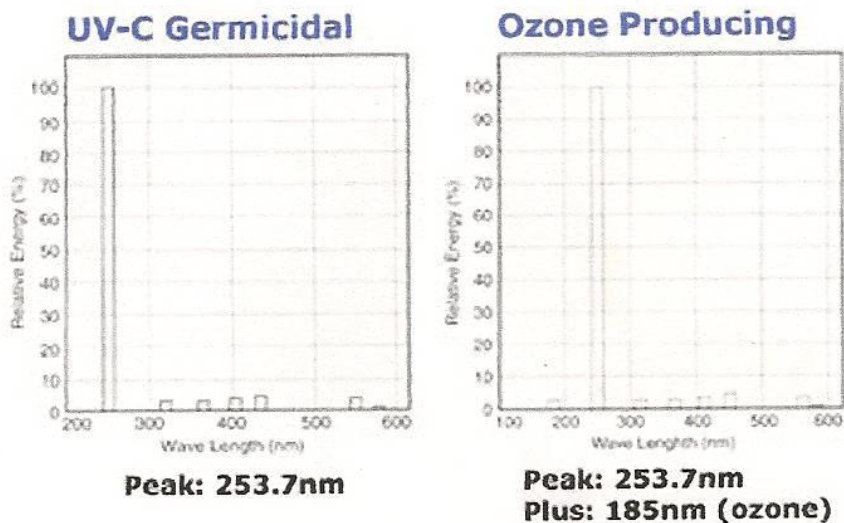


What is a Germicidal or UVGI Lamp?

Germicidal or Ultraviolet Germicidal Irradiation (UVGI) lamps are used to: disinfect air and water; cure inks and coatings, disinfect foods and destroy pollutants in water and air through UV-based "advanced oxidation". UV energy can be effective in killing biological contaminants such as mold/fungi, bacteria and viruses. For air disinfection, lamps are typically placed inside air handling ducts, mobile room air cleaning units and in special fixtures mounted toward the ceiling in rooms. The most common applications are in hospital / health care facilities, food processing plants, shelters, prisons, and other commercial uses where it is important to eliminate biological contaminants. The target wavelength for most ozone-free air purification applications is 254 nanometers. For water purification, ozone producing wavelengths are included and the target wavelength is 185 nanometers.



How does a Germicidal or UVGI Lamp Work?

Ultraviolet germicidal irradiation is produced by low-pressure mercury lamps similar to fluorescent lamps without a phosphor and with a quartz bulb. These lamps emit UV in the 200nm to 300nm range or that portion of the UV spectrum called UV-C. Also known as "shortwave" UV, it includes the target germicidal wavelength of 254nm. 95% of the relative intensity occurs at the mercury discharge line of 254 nanometers - proven to be the most effective in germicidal applications.