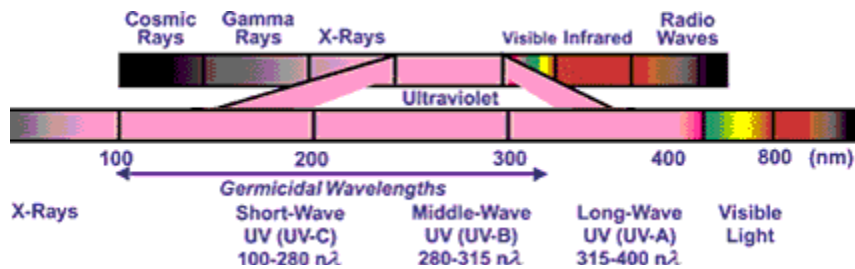


## Specifications for Germicidal Bulbs used in E-Z Set UV System

Ultraviolet light is part of the light spectrum, which is classified into three wavelength ranges:

- UV-C, from 100 nanometers (nm) to 280 nm
- UV-B, from 280 nm to 315 nm
- UV-A, from 315 nm to 400 nm

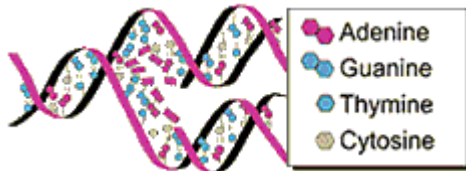


### What is germicidal ultraviolet?

UV-C light is germicidal - i.e., it deactivates the DNA of bacteria, viruses and other pathogens and thus destroys their ability to multiply and cause disease. Specifically, UV-C light causes damage to the nucleic acid of microorganisms by forming covalent bonds between certain adjacent bases in the DNA. The formation of such bonds prevent the DNA from being unzipped for replication, and the organism is unable to reproduce. In fact, when the organism tries to replicate, it dies.

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### How do ultraviolet purifiers work?

Atlantic Ultraviolet Corporation's purifier units contain one or more germicidal ultraviolet lamps. The **Ster-L-Ray™** germicidal lamp produced by Atlantic Ultraviolet Corporation is a short wave low pressure mercury vapor tubes that produces ultraviolet wavelengths that are lethal to micro-organisms. Approximately 95% of the ultraviolet energy emitted is at the mercury resonance line of 254 nanometers. This wavelength is in the region of maximum germicidal effectiveness and is highly lethal to virus, bacteria and mold spores. Therefore, the water or air that passes through the chamber is exposed to the germicidal uv light and the genetic material of the micro-organism is deactivated, which prevents them from reproducing and renders them harmless.

