

UVC germicidal lamp emits 253.7nm short-wave ultraviolet radiation. The rationale of the germicidal lamp is to change or damage microorganism's DNA and makes it unable to proliferate. It is widely used in hospital conditioner systems, disinfection cabinets, swimming pools and food industry, etc.

Germicidal Efficiency

| Microorganism | | Time (second) | Microorganism | | Time (seconds) |
|---------------|-----------------------|---------------|----------------|--|----------------|
| Bacteria | Bacillus Anthracis | 0.3 | Mycoticspore | Aspergillus Niger | 0.3-6.7 |
| | Clostridium Tetani | 0.3 | | Mucor Mucedo | 4.6 |
| | Dysentery Bacilli | 1.5 | | Penicillium Rogueforti | 0.9-3 |
| | Escherichia Coli | 0.4 | | | |
| | Staphy Lococcus Albus | 1.3 | Algae | Blue-green Algae | 10-40 |
| | Micrococcus Candidus | 0.4 | | Nematode Eggs | 3.4 |
| | | | | Green Algae | 1.2 |
| Virus | Bacteriophage | 0.2 | | Protozoa | 4.0-6.7 |
| | Influenza | 0.3 | | | |
| | Poliovirus 1 | 0.8 | Horse Sickness | Leukoderma | 2.7 |
| | Hepatitis B Virus | 0.8 | | Infectious Disease Pancreatic Necrosis | 4 |
| | | | | Viral Bleeding | 1.6 |

The effectiveness of germicidal UV in such an environment depends on a number of factors: the length of time a micro-organism is exposed to UV, power fluctuations of the UV source that impact the EM wavelength, the presence of particles that can protect the micro-organisms from UV, and a micro-organism's ability to withstand UV during its exposure.