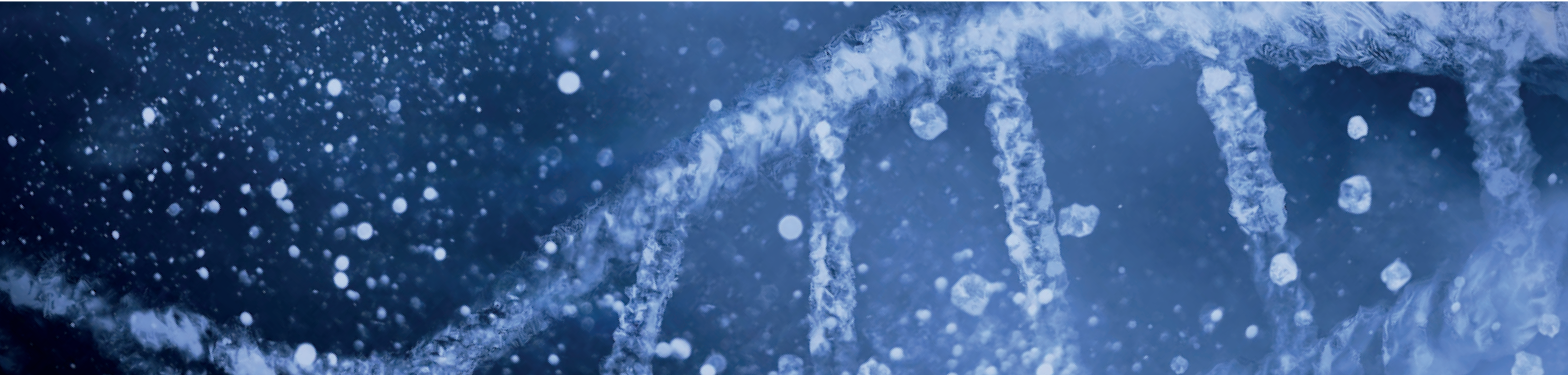
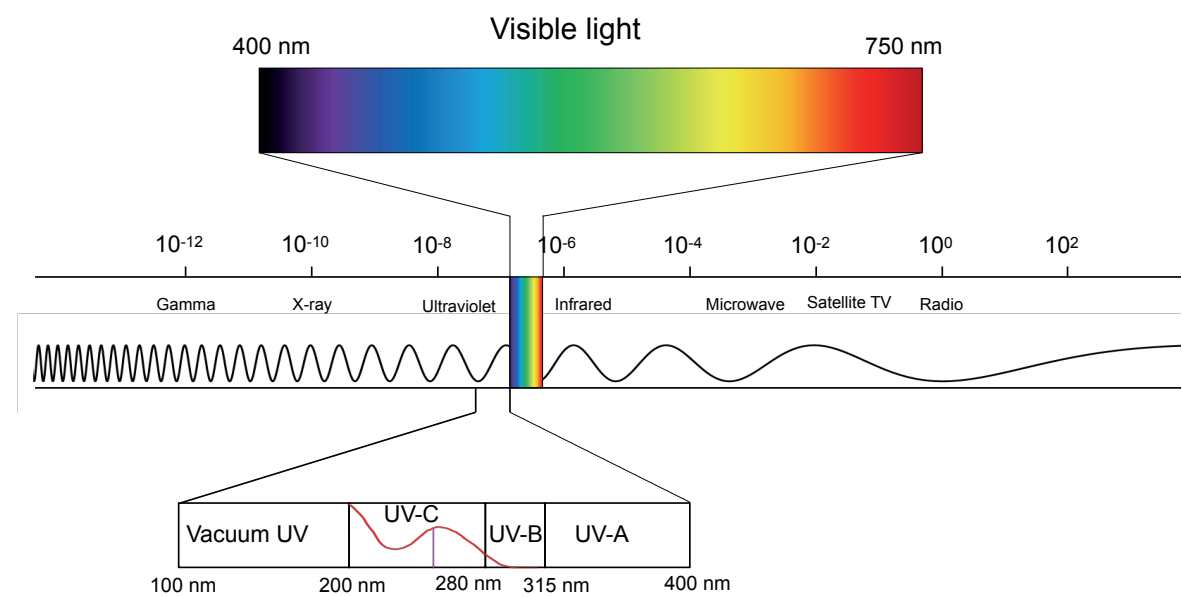


# UV-C Treatment



## Electromagnetic spectrum



UV radiation can be divided into four main categories; UV-A, UV-B, UV-C and Vacuum UV. The UV-C spectrum (200 to 280 nanometers) is the most lethal range of wavelengths for microorganisms. UV-C radiation can cause permanent damage to microorganisms. Each type of microorganism requires a specific UV-C radiation exposure rate to successfully complete the disinfection process.

The targeted microorganism must be directly exposed to the UV-C radiation long enough for the radiation to penetrate the microorganism's cell wall. However, it takes only a fraction of a second for UV-C radiation to inactivate waterborne microorganisms by breaking through the microorganism's cell wall and damaging their DNA. This often destroys the organism, or at the very least will impair its ability to reproduce.

### UV radiation is effective against all microorganisms

Water purification by UV-C radiation is the most effective sanitizing method available today. UV radiation destroys microorganisms in domestic pools up to 99.9%.

### UV pool sanitizers contribute to cristal-clear water

The most important perpetrator of cloudy water, microorganisms such as algae, will be eliminated by UV-C pool sanitizers. Chloramines can also be the indirect cause of cloudy water, especially when the disinfection level of free chlorine in the water is too low. UV-C lamps are able to typically destroys microorganisms up to 99.9% and breaks down chloramines up to 80%.

### With UV purifiers, you can reduce the use of chemicals for water treatment

UV-C purification makes sure there is more stability in pools and spas, therefore adding extra chemicals can be prevented.

### The end user will have lower costs in chemicals and maintenance

Materials in and around the pool suffer from chemicals added to the pool water. Because UV-C radiation destroys most of the harmful chloramines in the water, the materials in and around the pool get affected much less and need less maintenance.

### There is no risk of overdosing with UV pool sanitizers

Overdosing chemicals in pools and spas can, as mentioned before, causing serious health problems and even foamy or cloudy water. UV radiation cannot be overdosed and destroys all of the microorganisms.

### UV is a green, non-hazardous technology

Last but not least - UV radiation is an environmentally friendly way to sanitize pool water!

