

Cyanuric Acid

Ultra -violet light can destroy up to 90% of the free available chlorine in an outdoor swimming pool on a cloudless day. To prevent this from occurring cyanuric acid can be added to the pool water.

Cyanuric acid stabilizes the chlorine and protects it from degradation by the UV light, releasing the chlorine to disinfect as required. Unfortunately there is a downside to using cyanuric acid.

Cyanuric acid slows down the rate at which chlorine neutralizes pathogens and for this reason it is not permitted for use in indoor aquatic facilities.

Although the use of cyanuric acid is in widespread use throughout the industry, there is not a lot known about how it works. In light of this and the studies surrounding its toxic effects, it is suggested that the minimum amount of cyanuric acid as recommended by the manufacturer is used.

In the USA there are restrictions regarding the levels of use for cyanuric acid (less than 100ppm). This is due to suspicions relating to toxicity levels from within the scientific community.

Cyanuric acid can be absorbed through the skin, as well as ingested by swallowing pool water. It can also enter the body by inhaling the dust particles. Occupational Health and Safety guidelines for chemical handling should be strictly followed.

Cyanuric acid levels can also suppress ORP readings (HOCl is affected) and this can lead to overdosing of Chlorine. Levels in ORP systems should be not more than 20ppm.

Health Authorities require a slightly elevated level of sanitizer within the pool to compensate for the slower rate of disinfection due to Cyanuric Acid