



Cyanuric Acid

Cyanuric acid is a mild acid used to reduce the 'breakdown' of free chlorine by ultra-violet light.

Cyanuric acid is believed to work by forming short term bonds with free chlorine molecules in the water. While the chlorine molecule is bonded to the cyanuric acid molecule it is safe from destruction by ultra violet light.

However when the two molecules are bonded, the chlorine will not disinfect.

Our experience suggests that the best balance between chlorine 'stability' and disinfection can be obtained by keeping a cyanuric acid level between 25 milligrams per litre and 35 milligrams per litre, especially if using an ORP Or HRR Measuring Electrodes, as the cyanuric acid will mask the millivolt (mV) potential, affecting the accuracy of the controller and the response time of the measuring electrodes.

If the cyanuric acid level exceeds 50 milligrams per litre, too much of the free chlorine becomes bonded to the cyanuric acid and disinfection becomes impaired.

Over about 100 milligrams per litre, chlorine lock occurs and disinfection ceases no matter how much chlorine is added.

Dosing

Cyanuric acid comes as a whitish crystalline powder.

Cyanuric acid is slow to dissolve. Operators should use hot water and stir dissolve. The dissolved solution is then broadcasted around the pool.

The dry cyanuric acid should not be added directly to the pool as it will corrode the pool surface and may cause staining.

Operators should test the level of cyanuric acid of the pool at least once per fortnight and make adjustments as the level of cyanuric acid in the pool will gradually decrease due to loss through filter backwashing and water 'walked' out of the pool.

Operators should be able to calculate roughly what is required after the level of the pool has been tested as each pool is different.

As a guide, the level of cyanuric acid may be maintained by adding 2.0 kilograms for every 50 000 litres of water lost in backwashing or vacuuming.



As most pools lose in the order of 15 000 to 20 000 litres of water per week through backwashing, vacuuming and splashing, between 0.6 kilograms and 0.8 kilograms of cyanuric acid should be added to the pool after backwashing each week.

Cyanuric acid should not be added directly to the balance tank or filter system as it will lower the pH of water going through the filter and upset the reading of your automatic chemical control system.

In general, low pH water may strip out the alum in the filter and corrode the metal pipes and fittings.

Cyanuric acid should not be used to adjust pH.

Cyanuric acid is only used in Outdoor Swimming Pools only!

It should only be used for chlorine stabilisation.

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