Cyanuric Acid and Stabilized Chlorine Products FAQs

What is cyanuric acid? – Cyanuric acid is a chlorine stabilizer for swimming pools.

What does cyanuric acid do? – Cyanuric acid bonds with free chlorine protecting it from the sun's ultraviolet rays to reduce chlorine loss. Cyanuric acid can reduce the amount of chlorine needed to maintain chlorine residuals in outdoor pools. Cyanuric acid can potentially reduce the costs of chemical disinfection.

What are dichlor and trichlor? – Dichlor and trichlor are two solid chlorine compounds used in outdoor swimming pools. Both contain chlorine and cyanuric acid, so it is not necessary to add cyanuric acid to the pool. Dichlor usually comes in a granular form and is marketed for the residential pools. Trichlor is often found in a tablet or stick form for use in an erosion feeder for commercial pools.

What is the downside to cyanuric acid? – By forming bonds with the free chlorine, cyanuric acid can reduce the overall effectiveness of chlorine. The amount of time it takes to kill bacteria lengthens as the concentration of cyanuric acid increases.

Should I use cyanuric acid for an indoor pool? – No. Cyanuric acid is intended to reduce the loss of free chlorine caused by the sun's UV rays. Indoor pools are not exposed to direct sunlight, so there is no benefit in adding cyanuric acid to the pool water or using products containing cyanuric acid.

How much cyanuric acid should be used in a swimming pool? – Chemical suppliers recommend an optimal range for cyanuric acid of 30-50 ppm. Other recommend as low as 20 ppm for a good cost to-benefit ratio. Pools that use cyanuric acid should maintain a free chlorine residual of about 2 ppm.

How much is too much cyanuric acid? – At levels above 50 ppm, the reduction in chlorine effectiveness and cost of buying cyanuric acid begins to outweigh the benefits. Pools must be prohibited from use if the cyanuric acid level exceeds 100 ppm.

What are the effects of higher levels of cyanuric acid? – As cyanuric acid levels rise, free chlorine ability to disinfectant is weakened and the time to kill bacteria is longer compared to pools without cyanuric acid. As cyanuric acid builds up, chlorine becomes increasingly less effective in keeping the water clean and problems such as increased combined chlorines and cloudiness can occur.

Should cyanuric acid be used in hot tubs or spas? – At increased levels of cyanuric acid, the amount of time it takes chlorine to kill *pseudomonas aeruginosa* (the bacteria that causes "hot tub itch") can be as much as a hundred times as long as in a hot tub or spa. The use of cyanuric acid or stabilized chlorine in hot tubs or spas is NOT recommended.

How does one test for cyanuric acid? – Any pool operator who uses cyanuric acid or stabilized chlorine must have a test kit capable of measuring cyanuric acid. Cyanuric acid levels should be tested at least once a week.

How can cyanuric acid levels be reduced? – Cyanuric acid is never used up and accumulates in the pool water as a waste product. The best way to reduce cyanuric acid is to partially drain the pool and add fresh water. Some cyanuric acid will cling to the pool walls, plumbing, and filtration system, so it is recommended that surfaces are scrubbed during the draining process.