

MYTH OF CHEMICAL *Free* SWIMMING POOL TREATMENT

Many ozone manufacturers come up with very exciting proposals for swimming pool water treatment. Chemical free treatment concept is very exciting to hear and tempting to pool owners. The main issue for most pool owners is the toxicity associated with the use of chlorine as a disinfectant in swimming pools. What is chemical free treatment in swimming pool these ozone manufacturers are talking about? Is it ever possible?

The answer is always a big NO. Why? The reason lies in the fact that swimming pool water is often contaminated with numerous bacteria, virus, body oils, bird droppings, pseudomonas from landscaping, legionella Giardia and many more. Most of these contaminants are never addressed in pool water treatment. They have serious consequences to pool users' health. Hence, any pool water treatment regime has to be comprehensive to address all of them.

Chemical Free Treatment

It means there are no chlorine usage, no usage of chemicals for coagulation, no usage of anti-algae chemicals, and no usage of acids. Can ozone replace all of them?

The answer again is No. Ozone is not a magical wand to replace all these chemicals. Many of these chemicals play their role and a pool treatment has to be comprehensive, covering the entire spectrum of contaminants in the pool. Ozone will only replace chlorine as the primary disinfection and there is no alternative for the presence residual disinfectant in the pool and because no ozone residual is allowed in the pool (safety issues and all residual ozone must be removed before water enters the pool), residual chlorine is the only viable alternative.

Chlorine is the main chemical that causes the evolution of the so called chemical free treatment. But chlorine can never be replaced. It is the only chemical that can protect water in the pool when contaminants are introduced. Neither UV or ozone or any other chemical can replace chlorine.

But chlorine can be made safe with the use of ozone. Use of ozone ensures chlorine toxicity is reduced or removed totally.

What about Claims of Using Ozone and UV Together?

This is known as AOP (Advanced Oxidation Process) and used only in indoor pools. Indoor pools have reduced contaminants introduced into the pool and could be an ideal candidate for a 'chlorine free' pool (not 'chemical free' pool), since we still need to use other chemicals for flocculation, pH control, etc. If the indoor pool has a large bather load, often residual chlorine is also used along with ozone. Moreover, the UV lamps ideal for combination with ozone is a medium pressure lamp (not used commonly in India except for certain applications). Use of ozone alone does not mean chemical free treatment.

So, the next time when an ozone manufacturer talks to you of chemical free treatment, ask these questions and you may not get the correct answer. Ozone with residual chlorine alone is a better and safer combination for pool water treatment.

Claims that chlorine free pools are following German and Australian standards is totally wrong as both Australian and German standards require complete removal of ozone before it enters the pool and maintaining residual chlorine at 0.5 PPM. Few unsuspecting clients in India have fallen prey to these chlorine free concepts which is just not safe for the swimmers. It is suggested to any client that he verifies these standards before accepting any such proposal from ozone manufacturers to ensure that what he gets is totally safe for him and his family's health.

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