

Public Swimming Pool Water – The More Healthy Option

Public swimming pools are much more at risk from micro-organism water infection than private swimming pools and as a result the use of chlorine as the water sanitizer is considered to be the best approach in the battle against micro-organism attack, indeed the entire public swimming pool system in the UK is geared to the use of chlorine for this purpose. The trouble is that using chlorine introduces a whole raft of other health and environmental problems and issues not least the risk involved in exposing the public to cancer causing chlorine by-products called Trihalomethanes (THM's) and to Trichloramines.

This being the case, if chlorine must be used in public pools, the serious adverse effects of using chlorine must be addressed so as to minimize the risk involved in using chlorine to the health of bathers and the environment.

Up until recently this has not been easy to achieve mainly because there hasn't been a way of measuring the risk to bathers and the environment of using chlorine for this purpose. This all changed when Dryden Aqua Ltd (influential Micro-biologists based in Edinburgh) developed a formula for measuring the risk to bathers of swimming pool water which is sanitized using chlorine. **It's called the DAP Factor.** This simple formula which uses average bather load and the average amount of chlorine sanitizer which is consumed to work out a numeric factor is of interest to pool operators and bathers alike in determining the risk and hence the quality of the pool water. A DAP Factor below 1 is the target to achieve for healthiest pool water. For more information on the DAP Factor visit our on-line Information Library and see the file "[DAP Factor](#)".

Now that we have a simple way of measuring swimming pool water safety how can we improve it?

The main problems of using chlorine arise in the filter system of the pool. Sand and zeolite filter media provide comfortable breeding grounds in which bacteria can grow and thrive. Bacteria protects itself from chlorine by secreting and coating itself with a substance called bio-film which builds up in the filter equipment, pipework and sand / zeolite filter media and is extremely acidic.

Simply replacing the sand or zeolite filter media with **AFM®** (Active Filter Media) will significantly improve pool water quality and reduce the DAP Factor for a pool. **AFM®** has surface active properties which do not provide bacteria with a comfortable environment in which to grow and thrive.

By combining the use of **AFM®** with more technically advanced coagulants, phosphate removers and UV "shielding" applied through improved mixing equipment, makes achieving a DAP Factor below 1 possible.

The good news is that a total system solution now exists and is available from Dryden Aqua Ltd.

In addition to bringing much improved water and pool-side air quality the system also significantly reduces operating costs by reducing chlorine, water (backwashing) and electricity consumption - So there is no longer any excuse for public swimming pool operators not to offer the highest quality and safest standard of pool water to their bathers whilst at the same time reducing operating cost and the burden on our environment.

Visit our on-line Information Library and see the file:
["DA Swimming Pool Water Treatment"](#).

"To put it frankly, it is our opinion that public pool operators, who are not prepared to embrace proven, new technology in order to reduce the known risks associated with exposure to chlorine, are not only putting the long-term health of bathers and employees at greater risk, which by itself may be considered by many to be irresponsible in the extreme, but also they are incurring unnecessary operating cost thereby leaving themselves open to criticism for wasting money. In our view it's shameful to carry on using outdated water sanitizing technique when the risks to health are so high and when a healthier, cheaper alternative system is available. By making only a few alterations to existing pool plant, (for relatively little outlay in capital cost), and replacing some of the old water cleaning products with new improved ones, huge benefit can be gained for public and employee safety as well as reducing the adverse impact on our environment whilst at the same time saving cost".