

Different Testing For Public Pools & Spas?

(The following article was submitted by Joe Sweazy, Technical Sales and Services Manager for HACH Company/ETS)

Do public pools and spas need to be treated differently than residential pools and spas?

Undoubtedly, everyone reading this article gave a resounding "yes" to that question. So do public pools and spas need to be *tested* differently?

Did that question generate some blank stares?

There are several factors to take into consideration when answering the question. What are the regulations for public pools and spas in the state and county that you are in? How frequently are you testing the water? How well is the pool and/or spa maintained between visits? What environmental factors must be considered?

However, before considering all of these questions, we need to consider

the different testing methods that are available. This will make answering those questions a little bit easier.

Liquid/Tablet Test Kits

There are two basic types of liquid test kits: "OTO" and "DPD." The type of indicator chemistry used to measure chlorine (or bromine) most frequently identifies the test kits, because it is the most important chemistry in terms of bather safety.

OTO is short for orthotolidine (it may also be shortened to OT), a liquid reagent that measures total chlorine (or total bromine). If this is the chemistry that you are using, reconsider. OTO kits measure both free (good) and combined chlorine (not so good) together on one test. It does not distinguish between the two, leaving you to wonder whether the water is actually properly sanitized. You will not get a complete picture of the water quality using OTO.

The DPD chlorine indicator is a much better choice for professional testing. DPD is short for diethyl-p-phenylenediamine. The DPD indicator is a free chlorine indicator that can tell you exactly how much chlorine you have chemically available to sanitize. For this reason, this test reagent is more commonly used and recommended for liquid/tablet chlorine testing. The DPD is a color indicator that reacts with the chlorine in the water to form a pink/purple color. The color is then matched to a standard to determine the actual level.

A refined version of the color comparison method is the FAS-DPD titration. The FAS-DPD is the latest trend in chlorine testing at public facilities. With this titration method, you can measure the free and combined chlorine directly and measure in increments of 0.2 parts per million

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