

Tools for Enhanced Testing (Pools & Spas)

Taylor has developed several products to make your testing more efficient. These simple tools are a great addition to a test kit or Counterlab Rx 2™. Pick and choose the add-ons you prefer based on your needs. Save time, avoid common errors, and improve your testing experience.

SpeedStir®

The **SpeedStir (#9265)** makes quick work of drop tests performed in Taylor's #9198 sample tube. This palm-sized, portable magnetic stirrer will thoroughly incorporate each addition of reagent in a fraction of a second. No more manual swirling! Place the water sample on the mixing platform then gently drop in the Teflon®-coated stirring bar. Use the power button to turn the unit on in well-lit conditions. When ambient light is poor, press the light button and six LEDs below the mixing platform will light up to make color changes in the test sample easy to see. Press the power button to stop the stirring action, or the unit will turn itself off after five minutes. Made of high-impact polystyrene, it is water resistant (you can spill water on it, but you should not submerge it).

SampleSizer®

Many Taylor drop tests are done with a 10 mL or 25 mL water sample in either the #9198 sample tube or a 2000 Series™ comparator block. A 44 mL sample is used for the pH color comparison test in the 2000 Series block. Using these new tools, you won't need to flick off the excess water to get the meniscus to rest precisely on the fill line. Simply lower the appropriate **SampleSizer (#6190** for 10/25 mL samples or **#6191** for 44 mL samples) into the test vial filled with the water to be tested. It will displace exactly the right amount to leave the correct volume to perform the test! The SampleSizer is removed once the extra water is splashed out. Clean and dry it before storing or using it for another test. These tools are made from machined aluminum anodized for longer life.



Daylight Comparator Lamp

When we formulate our colorimetric tests, we ensure the color that develops in the treated sample matches the color standards in the comparator block when viewed under natural northern light. But what if you must test indoors, away from the daylight needed for reliable results? Use simulated natural light instead!

The **Daylight Comparator Lamp (#9199)** works well with Taylor's printed-color standards (#9056 comparator from the 2000 Series™) as well as with the liquid-color standards in the Midget™ comparator that's found in several of our Professional Series™ and Commercial Series™ kits. It's portable, compact and provides the same high-quality illumination used by professional photographers. The Daylight Comparator Lamp can be held up by hand behind these comparators or mounted on the wall for a more permanent solution. It can also be placed on a lightbox stand (#9200) to accommodate our longer Slide™ comparators (the liquid-color standards in Taylor's top-of-the-line professional kits).

Watergram® Water Balance Calculator

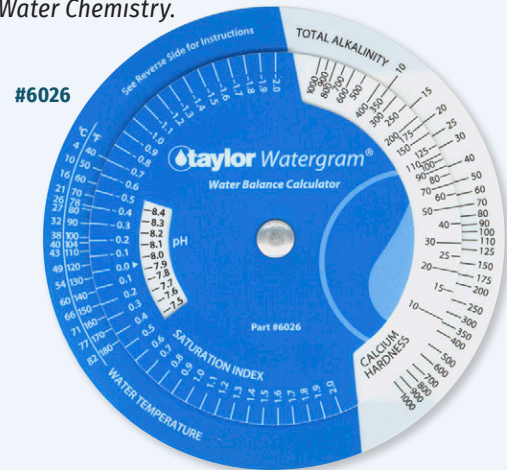
To prevent conditions that lead to damage in pools and spas, several water chemistry parameters must be kept in harmony or “balanced,” primarily pH, total alkalinity, and calcium hardness, but also water temperature and total dissolved solids.

Once these values have been determined, they are plugged into a complicated mathematical formula to calculate the water’s Saturation Index:

$$SI = pH + TF + \log CH + \log ALK - \text{Constant}$$

where SI is the Saturation Index, pH is the measured pH, TF is the temperature factor, CH is the measured calcium hardness, ALK is the measured total alkalinity minus any cyanurate alkalinity, and the Constant is a combined factor for temperature and ionic strength correction, plus concentration conversions. Water is “ideally balanced” when the SI is zero. It is considered “balanced” when the SI is within the range of -0.3 to +0.5. (Some authorities recommend -0.3 to +0.3.) When the SI is lower, corrosion of the vessel’s surfaces and fixtures is likely to occur. Metals dissolve and stain walls. Plaster etches, concrete pits, grout dissolves. When the SI is higher, calcium carbonate comes out of solution, first causing cloudy water and then forming unsightly scale (rough patches) on surfaces and plugging the filter and circulation piping. Heaters are particularly susceptible to corrosion and scaling.

All but the mathletes among us find the Saturation Index calculation daunting. To simplify the process, many years ago Taylor developed a circular kind of slide rule to do the number crunching. We called it the **Watergram Water Balance Calculator**. The Watergram is included in 2000 Series™ kits with the routine tests for water balance and in our countertop laboratories. The Watergram is included in 2000™ Series kits with the routine tests for water balance and in our countertop laboratories (**L-0205** and **L-0206**). It also can be purchased by itself (**#6026**), in a 12-pack (**#6026-12**), or in a replacement pack (K-2004) that contains our waterproof testing and treatment guide, *Pool & Spa Water Chemistry*.



SampleSizer Demo Using #6190



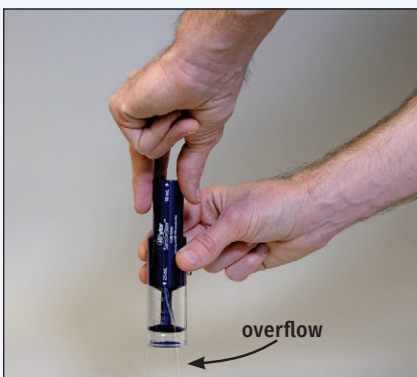
1. Rinse and fill #9198 sample tube with water to be tested in excess of desired volume.



2. Orient SampleSizer for desired test volume: an arrow indicates the skinny end goes first for a 25 mL sample.



3. Slowly lower the tool into the sample...



4. ...all excess water will be displaced.



5. Tool should touch bottom.



6. Carefully remove SampleSizer to avoid dragging out remaining water.