Basic Water Testing Methods

The basic methods used in testing pool and spa water include:

• *Colorimetric* — the most widely used method, which simply means that some sort of color comparison is used to read the test results. Used to test for chlorine, bromine and pH, a reagent is added to a water sample and reacts with a specific chemical species to produce a colored product. The color's intensity is then matched with a color standard or reference chart, also known as a color comparator.

• *Turbidimetric* — where the relative cloudiness (or turbidity) of the water is used to determine the results. Used for cyanuric acid tests, a measured amount of test reagent is added to a water sample that results in cloudiness. The amount of cloudiness is proportional to the concentration of the chemical be analyzed.

• *Titrimetric* — used for total alkalinity and calcium hardness testing. This test method involves adding a standardized reagent to a measured sample until a color change occurs. The volume of standardized reagent used to produce the color change is proportional to the concentration of the chemical being tested.

• *Electrometric* — which uses an electrical probe or electrode to test the sample and displays results on an electronic meter.

• *Test Strips* — which can be dipped directly into the pool or spa water and read on a color chart for a variety of tests. ■