



## Insta-Test® Test Strip Tips

### General Use Tips

1. Store vials indoors away from extreme heat and moisture.
2. Avoid pulling strips from vial with wet fingers.
3. After opening vial shake out strips, pick one for use, and then firmly reseal cap.
4. Immerse the strip at least 12 inches below the water surface (in pools, in spas just below water surface is fine) and swirl the strip 3 times in about a one foot circle.
5. Always lift the strip from the water with the pads face up (level). DO NOT shake off excess water.
6. Start reading results promptly after removing the strip from the water beginning with the end pad (e.g. Free Chlorine) and then downward in order. This allows the pH pad several seconds to fully develop its color.
7. Note that when testing a sample from the pool obtained in a cup-size container the strip should be swirled 5 times for proper exposure.

### Trouble Shooting Tips

#### Free Chlorine Test

##### No Color?

- At zero ppm of Free Chlorine the pad will remain a soft yellow color, when the pad looks white there is a trace level (such as 0.5ppm) on hand but the purplish hue on the color chart will be adequately visible at 1.0 ppm.
- Make sure the proper 3 swirl method was followed. A simple dip and remove method will cause low readings.
- If the result is being compared to an OTO reagent test (which produces a yellow color) note that OTO only measures Total Chlorine. Thus your OTO result is likely to show higher results than the Free Chlorine test strip if undesirable "combined" forms of chlorine are present. It is "combined chlorine" that often irritates swimmers.

##### Inconsistent Coloring?

- It is not unusual to have a reacted strip where the majority of the pad looks like a specified color (e.g. 3.0) but then its center is not quite as dark (e.g. 1.5-2.0). Always read the majority color as your result. Your actual result may likely be a bit less than the majority color (e.g. 2.5-2.9).

##### Dark Coloring?

- If another test such as DPD appeared colorless and the strip looks dark purple its because the free chlorine level is beyond 10 ppm. High chlorine levels can bleach out a DPD test to a clear color but cannot bleach out the strip color.

#### Alkalinity Test

##### Strange Purple Color?

- A dark purple color indicates very high levels of alkalinity but a soft lavender color can develop in mid to upper alkalinity levels when testing is done indoors under sodium vapor gas bulbs. Such lighting actually changes the color hue. If this happens, simply dip the strip, walk into a room with better lighting and read before 30 - 40 seconds have elapsed. Outdoor daylight is ideal when its available.

#### pH Test

##### Inconsistent Color?

- As with chlorine, if a majority of one color is evident use that as your result. For example, if the primary color looks like a 7.6 but also has some red hues appearing like an 8.0 take the midpoint 7.8 as your result. Be sure not to read pH first since best results are obtained when the pad has been exposed for several more seconds than the rest. As always read all results before 30 seconds have elapsed.

##### Bright Yellow?

- If a pH level is very low (<6.5) a yellowish color could develop. Add a pH increaser to your pool/spa and retest after the water has

circulated or call a pool professional. A low pH level can cause severe corrosion if not treated promptly.

#### **Purple Color?**

- High sanitizer levels of chlorine or bromine (> 10 ppm) can interfere with the indicator and cause a purple reading. If this occurs retest after the sanitizer is down below 10ppm.

#### **Dark Brown Color?**

- A dark, syrup-like brown color can develop if the sanitizer level is way too high. If you get this color do not enter the pool or spa since your chlorine/bromine level is in excess of 100 ppm! Consult a pool professional for advice on reducing the level to a safe range.

#### **Color Changed**

- Always read pH last so the pad has about 10-20 seconds to fully react after removal from the water. It is best though to read all tests before 30 seconds have elapsed after the strip came out of the water.