BASIC WATER CHEMISTRY

Water Treatment And Chemicals

Testing Tips

1. Rinse test tubes before and after each test.

2. Obtain water samples from 40cm below pool or spa surface and away from return outlets.

3. Spill water from tube until level with test line mark on tube.

4. Hold dropper bottle vertically over tube, and add one drop at a time and swirl water with each drop to mix.

5. Perform test in shaded area, viewing test results against a lit background. Alternatively, slide the insert card into grooves provided at back of test vial.

6. Store test kit in a dry, dark, cool place.

7. Replace test solutions at the start of each season.

GENERAL products used in pools and spas to maintain perfect water can be purchased from our shop in North Shore Drive Burpengary.
Note - due to the dangerous goods act, acids & chlorines will not be sent through standard mail.

DO NOT PERFORM FOLLOWING TESTS IF TOTAL AVAILABLE CHLORINE EXCEEDS 5.0 mg/L OR IF TOTAL ACTIVE BROMINE EXCEEDS 11.0 mg/l

CHLORINE/BROMINE TEST DPD

1. Fill CL tube to mark with pool or spa water.

2. Without touching tablet with fingers, drop one DPD #1 tablet into tube.

3. Place cap on tube and invert several times until tablet dissolves.

4. Free Chlorine Reading: Compare tube colour with adjacent colour standard. The result is read in milligrams per

pH TEST - DEGREE OF ACIDITY/ALKALINITY

1. Fill large tube to pH mark with pool or spa water.
2. Add 1 drop of solution #4, swirl to mix.
3. Add 5 drops of solution #2, swirl to mix.
4. Compare the tube colour with adjacent colour standards to determine pH reading.

NOTE: If the pH reading is above 7.6, save the test sample and proceed to the Acid Demand test.

ACID DEMAND TEST

1. Using water sample from pH test, add solution #3, one drop at a time, swirling between drops.

litre.
(mg/l)

5. Bromine Reading: Compare colour in vial
with bromine standards to determine.

TOTAL ALKALINITY TEST

1. Fill large tube to Total Alkalinity test line with pool or spa water.

2. Add 1 drop of solution #4, swirl to mix.

3. Add 2 drops of solution #5, swirl to mix.

4. Add solution #3 one drop at a time and swirl between drops to mix.

5. Count drops needed to change colour from blue to clear or slightly yellow.

6. Multiply the number of drops X 10 to obtain mg/l (milligrams per litre) reading. Example: 7 drops X 10 = 70 mg/l. Ideal Total
Alkalinity is 80-120 mg/l for plaster finished pools or 120-150 mg/l for vinyl, painted or fibreglass pools. If your reading is less then
desired - add sodium bicarbonate. If more
than desired, acid is usually required. Perform
the Add Demand test.

2. Count drops needed to change colour to nearly match pH colour standard. Do not
count drops which give a 7.2 reading or below.
3. Remember the number of drops added and refer to the acid demand chart in the test kit
booklet to determine quantity of acid required.
NOTE:
A. Add no more than 500ml of liquid acid to each 40,000 lt of water capacity in any one day.
B. Never add add acid and chlorine at the same time.
C. Always add acid while filter is running.
D. Add acid in area away from skimmer and metal fixture.