

# WATER BALANCE GUIDELINES CARD

TEST FOR	RECOMMENDED RANGE	TEST FREQUENCY	POSSIBLE CONSEQUENCES IF	
			LOW	HIGH
Free Available Chlorine	1.0-3.0 p.p.m. .5-1.5 p.p.m. w/Frog unit	Daily	Algae and bacteria formation	Possible odor and eye irritation
PH (4)	7.4-7.6 p.p.m.	3-4 times a week	Plaster etching; spots; roughness; streaks; metal corrosion; discoloration/stains	Plaster scaling; discoloration and roughness. Increased chlorine usage. Cloudy water.
Total Alkalinity (4)	120-150 p.p.m. (1) for vinyl & plaster 135-180 p.p.m. (1) for fiberglass.	3-4 times a week	Same as PH problems. PH bounce.	High acid demand; scale formation; roughness.
Calcium Hardness (4)	180-250 p.p.m. for vinyl & plaster 250-350 p.p.m. for fiberglass.	In store once a month	Plaster etching; spots; roughness; streaks; metal corrosion; discoloration/stains	Scale formation; rough and/or discolored plaster; limes heater and piping.
Stabilizer	40-60 p.p.m. (2) 60-90 p.p.m. (3)	In store once a month	Chlorine dissipates rapidly; protection reduced	Additional chlorine required to maintain proper level; dull flat water.

**TOTAL DISSOLVED SOLIDS TESTED AT STORE MONTHLY**

NOTES:

- (1) After adjustment for stabilizer, if required.
- (2) If using a stabilized chlorine method of chlorination.
- (3) If using a non-stabilized method of chlorination.
- (4) Ph, Total Alkalinity, Calcium Hardness, total dissolved solids and temperature are the key factors that determine water balance. Balanced water is usually defined as water that is neither corrosive nor scaling, but is in a state of “dynamic equilibrium” and as such is constantly seeking to maintain specific levels of minerals.

When pool water is deficient in its mineral levels, it will corrode, etch or dissolve any metals plaster or grout it comes in contact with to satisfy its “hunger” and thus balance itself.

When pool water has excess levels of mineral constituents, it will seek to relieve its “over fed” condition by releasing particles either as scale, residues or cloudiness. It will continue to do so until the pool reaches that “just satisfied”, or balanced, condition.

**Both “corrosive” and “scaling” water can do permanent damage to equipment metals, plaster and tile grout, and you as the pool owner have sole responsibility to insure the balance of your water. Protect your investment through frequent and thorough testing and chemical maintenance.**