

Periodic  
PRODUCTS  
Guide to **Balanced Pool Water\***



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Parameter	Low Readings	Ideal Readings	High Readings	Low Reading Problems & Solutions to INCREASE	High Reading Problems & Solutions to DECREASE
Free Chlorine ppm (all forms)	1.0	1.0 - 3.0	4.0	Problem: Not sanitizing Solution: Add chlorine	Problem: Oxidizes metals Solution: Wait – sun destroys chlorine
Combined Chlorine ppm	0	0	> 1/2 free chlorine level		Problem: Irritating chloramine levels; sanitizing compromised Solution: Shock to achieve total chlorine levels 10x the combined chlorine level
Total Chlorine ppm (Free + Combined)	1.0	1.0 - 3.0	4.0	Problem: Not sanitizing Solution: Add chlorine	Solution: If combined chlorine too high, shock pool. If free chlorine too high, allow sun to destroy chlorine.
Bromine ppm	2.0	2.0 - 4.0	4.0	Problem: Not sanitizing Solution: Add bromine	Problem: Oxidizes metals Solution: Wait – sun destroys bromine
pH (lower pH = more active chlorine)	7.2	7.4 - 7.6	7.8	Problem: Aggressive water (eats metals & pool surfaces); cloudy water; loss of alkalinity Solution: Depending on pool chemistry, add sodium carbonate (soda ash) or sodium bicarbonate	Problem: Scale; metal stains; cloudy water Solution: Add sodium bisulfate or muriatic acid
Total Alkalinity ppm	60	80 - 120 (liners) 100 - 125 (plaster)	180	Problem: Aggressive water; pH swings; green water Solution: Add sodium bicarbonate	Problem: pH lock; cloudy water; scaling Solution: Add sodium bisulfate or muriatic acid
Calcium Hardness ppm	150	200 - 400	1000	Problem: Aggressive water; corrosive (water can etch/pit surfaces) Solution: Add calcium chloride	Problem: Filter calcifies; cloudy water Solution: Partially drain water & refill
Cyanuric Acid (Stabilizer) ppm	10	30 - 50	100	Problem: Chlorine levels difficult to maintain Solution: Add stabilizer	Problem: Sanitizing power of Chlorine inhibited Solution: Partially drain water & refill
Total Dissolved Solids (TDS) (*includes NaCl added at startup for salt water pools)		< 1500 above startup ppm*			Solution: Partially drain water & refill
Iron ppm		0.0	0.3		Problem: Staining; water colored Solution: Use CuLator®
Copper ppm		0.0	0.3		Problem: Staining; water colored Solution: Use CuLator®
Temperature (°F)		78° - 82°	104°		



\* Chart based on APSP recommended water parameters