

## Monitoring and Maintenance

**Water Chemistry Parameters - VERY IMPORTANT NOTE!** Your Pool Pilot™ *Soft Touch* is designed to provide Purifier on a daily basis. We recommend the following water chemistry ranges and periodic checks to monitor your systems efficiency. Always follow all local and state requirements.

Biweekly Checks:		Monthly Checks:	
<b>Free Chlorine:</b>	1.0 – 3.0 PPM	<b>Calcium Hardness:</b>	200 – 400 PPM
<b>Or Bromine:</b>	2.0 – 4.0 PPM	<b>Total Alkalinity:</b>	80 – 120 PPM
<b>pH:</b>	7.2 – 7.8	<b>Cyanuric Acid:</b>	60 – 80 PPM
		<b>Salt Residual:</b>	2500 – 3500 PPM
		<b>Saturation Index:</b>	± 0.3 pH of saturation
		<b>Visual Cell Inspection</b>	for wear, scale or debris

**CHLORINE/BROMINE REQUIREMENTS:** During Peak Purifier Demand (rainy season or heavy bather usage) it may be necessary to increase your purifier level by increasing your Output Level setting and/or pump run time. Conversely, during Low Purifier Demand, you can decrease your Output Level to a lower setting. For extremely Heavy Purifier Demand or to boost your purifier levels quickly, you can **Boost** the system or supplement with a Potassium Monopersulfate based shock. If the water is clear but is difficult getting a bromine residual using DPD or test strips, we recommend using an OTO test kit.

**NOTE: During cold-water conditions, below 60°F, Purifier demand is reduced significantly.** For colder climate regions with sustained low or freezing temperatures, contact your local pool professional for proper pool winterizing instructions.

**⚠️ WARNING:** Excessive chlorine levels can cause corrosion damage to stainless steel rails, ladders, heater heat exchangers, light faceplates and other metallic equipment. Avoid over saturation of chlorine levels.

**pH:** When pH levels fall below the recommended range, Purifier is used up quickly and can be damaging to equipment. For pH levels higher than the recommended range, Purifier becomes less effective and works harder to keep your pool purified. Improper pH also contributes to the strong smell, red eyes, dry itchy skin and brittle hair conditions associated with “too much Chlorine”.

**CALCIUM HARDNESS AND TOTAL ALKALINITY:** Your Pool Pilot™ *Soft Touch* provides 100% pure sodium hypochlorite and does not affect the calcium hardness or total alkalinity levels. Maintain and balance only as needed.

**CYANURIC ACID (STABILIZER/CONDITIONER):** This chemical goes by either trade name and allows the chlorine residual to last longer by protecting it from the UV degradation of the sun. With low or no Cyanuric acid it is possible for the chlorine to be used up as quickly as it enters the pool. Check and maintain your cyanuric acid levels at the same time as your salt level, as these tend to deplete at the same rate.

**NOTE: For Bromine or indoor pools, it is not necessary to add stabilizer.**

**SALT RESIDUAL:** Your Pool Pilot™ *Soft Touch* works most efficiently with salt levels between 2500- 3500 ppm (2,5 – 3,5 g/l). If it falls below 2500 ppm (2,5 g/l), determine the salt level and adjust according to the SALT REQUIREMENT. Low salt will cause premature deterioration of the Cell blades. For “SEAWATER” pools, your Pool Pilot™ *Soft Touch* is designed to handle up to 35,000 ppm (35,0 g/l), however, salt levels above 6000 ppm (6,0 g/l) can be corrosive to metallic fixtures.

**BROMINE RESIDUAL:** Along with the normal Salt level, add 1lb (0.45 kg) Sodium Bromide (NaBr) per 2000 gallons (0.75 m³) of water. Your Pool Pilot™ *Soft Touch* will now generate Bromine to purify your pool. Maintain your bromine level by checking your salt level. Once your salt falls below the recommended range, we suggest you add 1lb (0.45 kg) sodium bromide with every 50 lbs (22.5 kg) of salt added. We recommend testing Bromine Purifier levels with an OTO test kit.

**SATURATION INDEX (SI):** a formula used to ensure that your total water chemistry does not fall into a scale forming or corrosive condition. Either condition can cause premature damage to the Cell, equipment and cementitious finish. Have your water professionally tested periodically according to the Saturation Index or use this chart to determine your water balance.

$$SI = pH + TF + CF + AF - \text{Constant}$$

Temperature		TF	Calcium Hardness	CF	Total Alkalinity	AF	TDS	Constant
60F	15.6C	<b>0.4</b>	150	<b>1.8</b>	75	<b>1.9</b>	0 – 1000	<b>12.1</b>
66F	18.9C	<b>0.5</b>	200	<b>1.9</b>	100	<b>2.0</b>	1001 +	<b>12.2</b>
76F	24.4C	<b>0.6</b>	250	<b>2.0</b>	125	<b>2.1</b>		
84F	28.9C	<b>0.7</b>	300	<b>2.1</b>	150	<b>2.2</b>		
94F	34.4C	<b>0.8</b>	400	<b>2.2</b>	200	<b>2.3</b>		
103F	39.4C	<b>0.9</b>	600	<b>2.4</b>	250	<b>2.4</b>		

Test your water for pH, Calcium Hardness, Total Alkalinity and TDS levels. Use the equivalent Factor in the SI equation.

**SI = ±0.3; balanced**

SI above + 0.3; scaling, staining or cloudy water conditions.

SI below -0.3; corrosive to metals, etches/deteriorates plaster finishes or skin irritating conditions.