

### The Science of Water Clarity

Keeping your water crystal clear around the clock may seem tough, but it's straightforward science. Three key factors govern clarity: filtration, circulation, and water chemistry. Secondary sanitation systems and some specialty products can also make an impact.

Factor	Why It Matters	Best Practices & Tips
Filtration	Filtration physically removes the dirt, oils, and microscopic debris that cloud pool water and harbor algae or bacteria, letting your sanitizer work more efficiently and reducing chemical use.	<ul style="list-style-type: none"> <li>✓ <b>Backwash or clean</b> filters regularly</li> <li>✓ <b>Monitor pressure:</b> Backwash when gauge rises 8–10 psi above starting pressure.</li> <li>✓ <b>Record filter media replacements</b> and replace as needed</li> </ul>
Circulation & Flow	Maintaining the correct turnover rate and monitoring GPM with a flow meter maximizes filtration efficiency, keeps chemicals evenly distributed, and preserves water clarity.	<ul style="list-style-type: none"> <li>✓ <b>Turnover rate:</b> aim for full volume turnover every 6–8 hours.</li> <li>✓ <b>Use a flow meter:</b> track GPM; confirm pump and pipe sizing deliver target turnover.</li> <li>✓ <b>Balance returns:</b> Adjust eyeballs to eliminate still corners; run pumps during peak debris times.</li> </ul>
Water Chemistry	Balanced water chemistry keeps pH, sanitizer, alkalinity, calcium, and cyanuric acid in their ideal ranges so chemicals work effectively, particles stay dissolved, and algae or bacteria can't grow	<b>Maintain:</b> <ul style="list-style-type: none"> <li>✓ <b>Free Chlorine:</b> 1.0–3.0 ppm</li> <li>✓ <b>pH:</b> 7.4–7.6</li> <li>✓ <b>Total Alkalinity:</b> 80–120 ppm</li> <li>✓ <b>Calcium Hardness:</b> 200–400 ppm</li> <li>✓ <b>Cyanuric Acid:</b> 0–30 ppm</li> </ul>
Secondary Sanitation & Specialty Products	Target stubborn clarity issues and boost filter performance with secondary sanitation systems (UV & Ozone), specialty products (enzymes), and filter-media upgrades.	<ul style="list-style-type: none"> <li>✓ <b>Enzymes:</b> break down oils and organics that clog filters—dose weekly.</li> <li>✓ <b>Glass media:</b> replaces sand or D.E. for finer filtration and less backwash.</li> <li>✓ <b>Regenerative Filters:</b> A regenerative filter “bumps” to self-clean with minimal water waste.</li> </ul>

## Clarity Maintenance Checklist

1. Clear skimmer baskets & pump strainer basket regularly
2. Check filter pressure and backwash/clean filter if 8–10 psi above starting pressure
3. Record flow-meter GPM regularly and verify turnover rate is appropriate
4. Test water chemistry daily and log all readings in a log book
5. Make chemistry adjustments asap and regularly check chemical controllers for accurate calibration
6. Utilize secondary sanitation systems like UV and ozone for enhanced disinfection and clarity
7. Research upgrades to your facility like treating the water with enzymes and upgrading to glass filter media from sand, or a regenerative media filter.

### Bottom Line

Crystal-clear water is achieved by a balanced system: clean filters, consistent circulation, stable water chemistry, and occasional specialty treatments. Follow the steps above, and your pool will be crystal clear throughout the upcoming summer season.

*For more information, or help with your aquatic facility, contact Vivo Support at **888-702-8486** or [support@vivopoint.com](mailto:support@vivopoint.com).*