

Reducing Total Alkalinity – Tips Sheet

What is Total Alkalinity?

Total Alkalinity (TA) is a very important component of overall water balance. Its primary role is to help keep pH in proper balance. The best definition of TA is; “*the measure of water’s ability to resist a change in pH.*” In other words, once you balance your pH successfully within the range of 7.4 – 7.6, it is TA that helps you keep it there. The secondary role of TA is to assist in providing the overall mineral content that all water requires to prevent unnecessary damage to surfaces. Water low in TA will see the pH bouncing up and down, almost uncontrollably. The swimming pool surfaces will also be at risk of long-term damage due to corrosion, especially vinyl liners. Water high in TA will find the pH constantly high and in need of reducing and a greater risk of scale formation, cloudy water and shorter filter runs.

Ideal TA Levels:

Vinyl, Fiberglass, Paint, Synthetic Surfaces:	125 – 150 ppm
Plaster (Marcite), Fully-Tiled, Aggregate:	80 – 125 ppm

Reducing Total Alkalinity:

When TA is high, it requires lowering with **Dazzle Pro Balance pH** or **Dazzle Acid Enhance**, a safe, dry form of acid. *AquaAce*, our highly accurate computerized water analysis program, will calculate the quantity of **Dazzle Pro Balance pH** or **Dazzle Acid Enhance** required, dividing the total amount into applications over a number of days. Lowering TA is traditionally done over a number of days to slowly and safely lower the TA without reducing the pH to dangerously low levels. When done properly, the TA slowly steps down and the pH never drops below 7.2. Safe and Simple!

Steps:

- 1) Test pH – if above 7.2, apply that days application of **Dazzle Pro Balance pH** or **Dazzle Acid Enhance**.
- 2) If below 7.2, wait for the pH to climb above 7.2 before making your next application. It will come up on its own.
- 3) Apply by broadcasting evenly over the water surface, primarily in the deep end.
- 4) Make note of the application to ensure you complete the number of applications required.

To Speed Up the Process:

- 1) Test pH – if above 7.2, apply that days application of **Dazzle Pro Balance pH** or **Dazzle Acid Enhance**. After 2 – 3 hours, test pH again. If the pH is still above 7.2, apply another application of **Dazzle Pro Balance pH** or **Dazzle Acid Enhance**.
- 2) Repeat this process every 2 – 3 hours, making applications of **Dazzle Pro Balance pH** or **Dazzle Acid Enhance** provided the pH remains above 7.2. This process allows for many applications to be made per day, provided the pH remains above 7.2.
- 3) Stop applications once the pH drops below 7.2, restarting once the pH climbs above 7.2 again.
- 4) Make note of each application and stop once the total number of applications have been made, as per the *AquaAce* prescription.



Damaged Vinyl Liner
Low TA



Scaled Chlorinator Cell
High TA leading to high pH