

PoolSchool - Total Alkalinity

Total alkalinity (TA) is a measure of the total alkaline substances found in the pool water. Basically, it's a measure of the dissolved solids. It's in the same area as pH, but is distinct from it.

In swimming pool water, we measure *bicarbonate* alkalinity, which should be between **80 - 120 ppm**. When TA is within this range, it prevents rapid pH changes and "stabilises" the pH level.

If the **TA is too low**, the grout between the tiles will be gradually eaten away, metals corrode, the pool's walls and floor can stain, the water can turn green, eyes burn and we can have pH bounce (pH rapidly going up and down, seemingly at random).

If the **TA is too high**, the pH is difficult to adjust, the water becomes cloudy, the chlorine loses its efficiency as a disinfectant and (according to your test kit) the pool constantly needs acid.

It is recommended that you test the TA regularly, but in practice it changes very little in a well-maintained pool. Most reagent test-kits do not measure for TA, but we have an answer to that: - Bring a plastic bottle of water from your pool into our shop - and we will test TA for you.

To raise the level of TA, use sodium bicarbonate; it is the only chemical which will do this without increasing the pH unduly. To raise the TA of your pool by 10 ppm use 700g of sodium bicarbonate for every 50 cubic metres of water. **Note** - you should add sodium bicarbonate at the rate of 700g per 50,000 litres of water every 4 days. Raising the TA can therefore be quite a time-consuming, slow process. If you just want to raise the TA, pH-Plus should not be used as it will affect pH also.

Lowering the TA is also a slow process. Acid, either liquid or dry, is added to the deepest part of the pool *with the filter off*. Add acid a little at a time, diluting or dissolving it before pouring it into the pool. Wait 3 days between applications. It could take days or even weeks to reduce the TA if it is very high. To lower the TA of a 50 cubic metre pool by 10 ppm use 800ml of liquid acid at 30% concentration or 100g of sodium bisulphate (dry acid).

If you would like a copy of our Email Newsletter, please send an email, with 'Subscribe' as the subject, to newsletter@deep-blue-pools.com

Deep Blue Pools have moved to Avenida Blas Infante, 36 - Opposite **Brit Essentials Supermarket**.

Copyright remains with author.