

### Total Alkalinity

Total Alkalinity is a measure of the amount of carbonate buffering capacity in the water. It acts as a "shock absorber" for pH. If Total Alkalinity is too low, the water is acidic and can corrode equipment and pool surfaces. It also causes pH bounce. The pH will drift down and any adjustments made to it will bounce and be difficult to control. If Total Alkalinity is too high, the water is alkaline and scale buildup and cloudy water can result. The pH will tend to drift up and will be very difficult to adjust.

Total Alkalinity, like pH, is affected by environmental factors. Rain, acidic sanitisers, addition of fill water and other product applications can all change the alkalinity over time. Total Alkalinity should be tested once every 4 weeks.

Proper Total Alkalinity levels vary with the water temperature, the sanitiser used, and the pool finish. Ideal range for Total Alkalinity is from 80 - 125 ppm for concrete and tiled pools, and from 125 - 150 ppm for all other surfaces. NOTE: Other values may be acceptable in that they will not damage the pool, cause water problems, or harm bathers. The computer can assess the overall balance of the pool, and the program bases adjustment recommendations on the saturation index.

### High Total Alkalinity

Add [Lo'N'Slo](#) or liquid acid (hydrochloric acid, muriatic acid) over a period of several days to lower the total alkalinity to the proper level. Discontinue acid additions if the pH drops below 7.2. Resume the applications where you left off when pH returns to 7.4 - 7.6. Any pH adjustment should not be necessary, as the alkalinity will tend to pull the pH up.

If the total alkalinity is high and continues to increase, and the pH is low and does not respond to additions of [Balance Pak 200](#), the problem could be carbonate scale. This occurs when pools are not allowed to gas off properly, such as in cases where solar covers are being used or the pool is indoor. Trapped gases from solar covers or poor ventilation in indoor pools are reabsorbed into the water and drive the pH down and the total alkalinity up. It can also cause the water to cloud. To balance successfully, remove any covers and/or ventilate as well as possible and begin making adjustments again. Keep the area well ventilated or the cover removed until the water balance is returned to normal. To prevent this problem, remove covers or ventilate indoor pools for several hours a day to allow gases to escape.

### Low Total Alkalinity

Add [Balance Pak 100](#) according to label or ALEX instructions to raise total alkalinity to the recommended level. Note: If the total alkalinity is less than 40 ppm, divide Balance Pak 100 additions into thirds and add 1 - 2 hours apart.