



1. **Hydrochloric acid:** also known as pool acid or muriatic acid, is a powerful acid that can be used to lower the pH and total alkalinity of your pool water.
 - **Primary Use:** Hydrochloric acid is commonly employed to **lower the pH** and **adjust total alkalinity** in pool water.
 - **Ideal pH Range:** Maintain your pool's pH between **7.2 and 7.6** for optimal comfort and effective chlorine sanitation.
 - **For Treating Algae** In the case of dealing with an algal outbreak a pH range of 6.8 to 7.0 increases effective chlorine sanitation.
 - **Total Alkalinity:** Aim for total alkalinity levels between **80-120 parts per million (ppm)** to stabilise pH. Be aware that T.A. may be lowered while lowering pH to 6.8 to treat algal outbreak and will need to be adjusted.
2. **Note:** Excessive total alkalinity can lead to high pH, water cloudiness, scaling, and ineffective chlorine action. Very low total alkalinity will cause the water to become corrosive and needs to be returned to balance as ble.
3. **Safety Precautions:**
 - **Corrosive Nature:** Hydrochloric acid is highly corrosive and can cause irreversible damage to skin and eyes.
 - **Chemical Burns:** Even brief exposure can result in chemical burns, so avoid skin contact at all costs.
 - **Irritating Fumes:** Handle hydrochloric acid only in well-ventilated areas.
 - **Protective Gear:** Always wear gloves and protective eyewear.
 - **Keep Away from Children and Pets:** Store it securely out of their reach.
 - **Safer Alternative:** Dry acid can be used as a milder substitute for pH and alkalinity adjustment.



4. Application Steps:

- **Mixing:** Add hydrochloric acid to water, **never water to acid**.
- **Surface Application:** Apply the mixed solution to the pool water surface.
- **Filter Mixing:** Allow **2-3 hours** of mixing with the filter running.
- **Recheck pH:** Measure pH after this period and make minor adjustments if needed.

