



# Total Dissolved Solids

**What is It ?** Total Dissolved Solids (TDS) are the amount of all materials dissolved in water which would be left behind if all the water was evaporated. The lower the TDS the more the water is considered closer to pure. TDS buildup over time is normal. Every time you add chemicals to water, you're increasing the TDS. When the water evaporates, it leaves behind all of the solids that had been dissolved in it. If you experience pool water clarity issues on a regular basis such as hazy, cloudy pool water or unknown source of algae or if you develop calcium deposits - you may have TDS issues.

## Where Does it Come From ?



**How do you test for it ?** A TDS Meter measures the TDS level of a water sample by determining the electrical conductivity of the sample. Readings up to 2,000 ppm are common. Over 2,000 ppm we consider high if you are experiencing clarity problems.

**What can high TDS do?** High TDS can cause eye and skin irritation, even though the pH is right and there are no chloramines in the water. TDS levels over 2,000ppm can cause the following

- \* Reduce sanitizer effectiveness
- \* Reduce Algaecide properties
- \* Increase turbidity (cloudy water)
- \* Cause staining of pool surfaces
- \* Enhance Scaling
- \* Increase natural corrosion

**How do you lower high TDS ?** \* Periodic partial or complete draining of pool. \* Increase the backwash period and replace lost water with water low in TDS \* Add a sequestering agent that will help in removing some of the large precipitates, which *can lower TDS in small amounts.*

### CAUTION

**pH adjustment with Sulfuric Acid.** Although sulfuric acid can be used in swimming pools for pH control, it tends to increase the level of TDS quite rapidly. It also adds unwanted sulfates to the pool water.

**Chlorine Generators & Pool Salt** Not all salt is 99% pure. Salt made for home water softeners has impurities in it. These impurities *Will raise the TDS.* Use Pool Salt, which has the impurities removed.

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### What can high TDS do ?

High TDS can cause eye and skin irritation, even though the pH is right and there are no chloramines in the water.

*Increasing TDS*



2,000 ppm

0 ppm

Acceptable

Maximum

#### ***Increasing TDS Can***

- \* Reduce sanitizer effectiveness
- \* Cause staining of pool surfaces
- \* Reduce Algaecide properties
- \* Enhance Scaling
- \* Increase turbidity (cloudy water)
- \* Increase natural corrosion