

# How complicated is water?

Surprisingly the water we drink from our taps may not be good enough for our pools. Tap water can have high or low pH levels. It can have too much or too little calcium and carbonates. It can have high levels of iron and other minerals that can cause stains, scale, and corrosion. Improper levels of pH, minerals and organic matter can and often will prevent pool chemicals from doing their work in the water.

The suitability of water for swimming pool use depends on its quality. Water quality is determined by the amounts and kinds of suspended and dissolved substances; the degree of acidity or alkalinity; temperature; color and transparency; taste and smell; and the presence of undesirable microorganisms.

All natural waters contain dissolved inorganic and organic substances. The total dissolved-solids burden of pool water may be as high as 2000 parts per million (ppm), the majority of dissolved solids are calcium, magnesium, sodium, potassium, sulfate, chloride, carbonate, bicarbonate, and silica.

Many pollutants may also be found in solution. These may be excessive amounts of substances normally present, such as nitrates, phosphates, and certain metals, or they may be materials not naturally found, such as pesticides, poisons and agricultural remedies.

There are also oils from suntan lotions, humans, leaves and car exhaust fumes. Suspended sediment is an important constituent of water quality, because it affects light penetration, and makes water undesirable for swimming.

Sediment is also linked to other water-quality factors because pesticides, phosphates, and bacteria may be attached to sediment particles. Fecal-coliform bacteria in water are an important index of bacteria.

Water temperature is important because it influences the metabolic rate of aquatic organisms and the rates of chemical reactions.

**Fortunately for our pool owners we only need to use  
Eco Aqua Magic!!!**

