

## **ALKALINITY**

### **Acid – Low pH**

On private water systems, one of the most common causes of corrosion is acidic water. Water that has a pH value of less than 7.0 is considered to be acidic. (6.8 or lower is a must to treat)

Signs of acid water are corrosion of fixtures, pinhole leaks in plumbing, and blue staining (from copper pipes) or rust staining (from iron pipes). Often these waters are great for drinking or household use, but are low in buffering calcium minerals, and contain dissolved carbon-dioxide gas, which can cause a low pH and acid condition. Without treatment, these waters can be contaminated with copper, lead, brass and other metals from piping, fixtures and appliances, turning good water into contaminated drinking water with these metals. Beside the fact that your drinking water is contaminated, this aggressive water eats through the solder joints (lead/tin/copper) causing pin hole leaks and also eats through Tankless Coils & all water shutoff valves as well as appliances in the home.

Treatment is accomplished by neutralizing the water with the use of an automatic neutralizer filter. These water filter tanks are filled with a blend of calcium and magnesium carbonates made from naturally occurring minerals, which dissolve into the water, making it less corrosive. More mineral can quickly and easily be added to the filter tank, typically once per year for most residential applications. No special tools are required. This type of neutralizer also acts as a filter removing sediment and small amounts of iron.

In some cases, instead of dissolved carbon dioxide causing the low pH or acidity, the acidity is caused by mineral acids, either natural or from mining or other industrial wastes. Often the pH is less than 5.0. Treating this type of water requires using a soda ash feeder, and in some cases injection of sodium hydroxide.

**PH higher than 7.0** can cause bubbling in the water – (although rare) there is no harm in this. If wished to be treated, it can be...however unless the results are very elevated it is normally not posing a threat to the home. This can be further discussed and options given to correct if your results return with high PH.