

Water Terminology

Municipal Water - is supplied by a city for public use. (Usually held in a reservoir) Essentia uses municipal water as its base and it can be produced anywhere there is a water supply. This significantly reduces the carbon footprint as this water does not have to be trucked/transported to the bottling facility. Essentia's purification process, applied to municipal water, produces water with 99.99% clarity.

Reverse osmosis- occurs when the water is forced across a series of membranes against the concentration gradient, from lower concentration to higher concentration using high pressure. Pressure is exerted on the side with the concentrated solution to force the water molecules across the membranes to the purified water side. This process will remove nearly everything from the water and provide just H₂O/water. There is less than 6ppm TDS of any mineral solid left in the water after the process of reverse osmosis has been applied, prior to creating the Essentia Water. At this point, the water has become a "pre-treated" water and is no longer a "municipal" water and thus considered a "purified" water.

Purified Water - refers to a type of water from which chemicals are removed via a variety of different purification processes. Essentia's pretreatment and purification process involves micro-filtration, UV sanitation, and reverse osmosis producing water that is 99.99% pure water that is void of possible heavy metals, chlorine, fluoride and possible pharmaceuticals with less than 6ppm (parts per million) of TDS remaining.

Ionic Separation Technology – is the process, perfected by Essentia Water, which separates the positively charged acidic ions from the negatively charged alkaline ions. The acidic water is discarded into the water table and the alkalized water is captured and bottled thus sustaining its health-wise properties for a shelf life of two years.

TDS – Total Dissolved Solids - is a measure of the combined content of all inorganic and organic substances contained in a liquid in molecular, ionized or micro-granular (colloidal sol) suspended form. Essentia contains less than 6ppm TDS following the purification stage of production and less than 70ppm after the electrolyte formula has been infused. As a point of reference, milk contains more than 5000ppm TDS.

Ion – is an atom or group of atoms that has a positive or negative charge as a result of losing or gaining one or more electrons. An acidic water ion has a positive charge and an alkaline water ion has a negative charge.

Acidic— having a pH of less than 7.0

Alkaline – having a pH value greater than 7.0

Alkalinity – the capacity of water for neutralizing an acid solution

pH— Potential for Hydrogen ~ a measure of acidity or alkalinity of a solution. The pH scale runs from 0 to 14 with 7.0 considered neutral. pH values below 7.0 are considered acidic and values above 7.0 are considered alkaline.

Water cluster – is a grouping of water molecules. A typical tap water cluster will contain between 10 to 13 molecules. Due to Essentia's Ionic Separation Process, the water cluster size is reduced to between 5 to 8 molecules thus reducing the surface tension of the water and allowing the nutrients to pass through the cell membrane providing rapid hydration on a cellular level.

Active Hydrogen – (hydrogen atom with an extra electron) is a property of restructured water. Through Essentia's Ionic Separation process (separation of positive and negative ions) the hydrogen-oxygen bond has been broken allowing for a higher level of hydrogen to be produced. Active hydrogen acts as a therapeutic antioxidant by selectively reducing cytotoxic oxygen radicals.

Surface tension – is the attraction of molecules to each other on a liquid's surface. Thus, a barrier is created between the air and the liquid reducing the surface tension of the liquid. The reduced surface tension enables Essentia Water to saturate the intracellular and extracellular fluid spaces more readily.

pH strip – (litmus paper) is a type of test strip used to test the pH of urine or saliva.

Calibrated pH Meter – is a test method used to test purified liquids, i.e. water. To accurately test purified waters, one must use a calibrated pH meter. pH test strips (litmus papers) will not test accurately on waters as pure as Essentia. A calibrated pH meter will give an accurate numeric pH reading

Electrolytes – are any substance(s) which, in liquid form, is capable of conducting an electric current through the body. Electrolytes help to regulate fluid levels in the body, maintain proper pH and play a vital role in the transmission of nerve impulses from the brain to the rest of the body.

Antioxidants – are any substance(s) that prevents or slows the process of oxidation, which produces cell damaging free radicals. Oxidation is a chemical reaction that transfers electrons from a substance to an oxidizing agent. Oxidation reactions can produce free radicals, which start chain reactions that damage cells. Antioxidants terminate these chain reactions by removing free radical intermediates, and inhibit other oxidation reactions by being oxidized themselves. As a result, antioxidants are often reducing agents.

Free Radical – is an unstable molecule that attacks other molecules causing them to become free radicals also. Cellular damage occurs, leading to disease, when free radical production becomes excessive.

ORP – Oxidation Reduction Potential – is a measurement to oxidize contaminants. The potential at which oxidation occurs. Essentia's ORP is in the negative range when produced and 82 when bottled.

Source Water – glacier, spring, artesian...naturally occurring bodies of water.

Electrolyzed Water – is produced by the electrolysis of ordinary tap water. The ions are electrically charged allowing for the separation of positive acidic ions and negative alkaline ions and measured in terms of pH, ORP, surface tension and electrical conductivity.

Ionized Water - is treated tap water that has not only been filtered, but has also been reformed in that it provides reduced water with a large mass of electrons that can be donated to active oxygen in the body to block the oxidation of normal cells. Ionized water is antioxidant-enhancing, improves taste, provides faster hydration, and has essential minerals capable of carrying oxygen.

Mineral Water – is water containing minerals or other dissolved substances that alter its taste or give it therapeutic value. Mineral water can be prepared or can occur naturally.