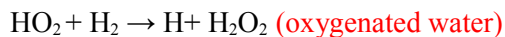
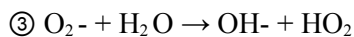
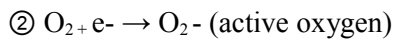
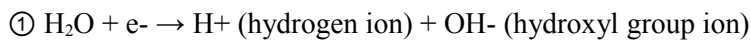


## Salus Washball Principle

■ In contact with water, the ceramic contained in the washball releases electrons, thus forming active oxygen and hydrogen peroxide (oxygenated water).  
→ The water that comes in contact with Washing Ball, either gain or lose electrons. The reaction generates powerful oxidized reducing power. The term, oxidized reducing power means the phenomena that give or receive electrons to substance. When substance loses electrons by combining with oxygen, it is called oxidization, and the phenomenon receiving the electrons that lose oxygen is called reduction. Released from the ceramic, electrons dissolve the water (H<sub>2</sub>O), and perform purification repeatedly with the chemical reaction with the hydrogen-generated ion and the active oxygen provided with electrons.



■ The agglomerates(groupings) of water molecules are fragmented into smaller elements(of a smaller size), thus increasing the water's dissolution power and enabling better penetration into the fabric's pores for the purpose of elimination dirt.

→ The Cluster(water mole group) of water disconnect the coupling of hydrogen and oxygen and become small, 5-6 cluster. AS Cluster get smaller, dirt dissolution power, and power to seep through clothing get stronger. The surfactant effects increase so that the washing with small amount of detergent becomes possible.

■ The ceramic contained in the washball emits infrared rays that are absorbed by the water molecules. The temperature rises, thus increasing the molecular movements. The activity of the water thus increases, as does its cleaning power(suspending the soiling).

→ Basically, we need to know far infrared rays(FIR). Far infrared ray, as a kind of electromagnetic waves, is the invisible sun light with our eyes.

The sun's ray is classified into two sections - visible rays and invisible Rays.

As defining in many encyclopedias, the wavelength of FIR is much longer than it of visible rays and we can't be invisible FIR. It has the native features that heat-action is large and [penetration](#) is strong, as well as resonance action to the molecule of organic substance is strong.

From an particle physical science point of view, resonance means the phenomena which [the particles to consist of an atom](#)(=hadron) collapse with their quite short life. When it is, the hadrons collapse by the medium of nuclear force.

The native features like the above of FIR enable the activation of water accelerates the thermal motion of a molecule, it also accelerates the activation of dissolved material among molecules.

- Water molecules, activated by the washball, are absorbed and provide protection against the phenomena of oxidation, thus preserving the fabrics' elasticity(and colours).
- WashBall is made with various of the optimizing natural ceramic Material composition such as K, Na, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub> and etc. under high temperature in order to reduces the surface tension increases surface active power and pH value for the most laundry condition. As the result of that, Water molecules, to be activated by the washball and be absorbed into fabrics, prevent the erosion of electrolyte and delays the denaturalization and oxidation of the substance. Therefore, it minimizes the damage of fabrics and preserves the fabrics' elasticity (and colours).
- The small-aggregate structure of the water molecules and the presence of active oxygen and hydrogen peroxide enable a bleaching and anti-bacterial action to be obtained. This destroys moulds and pathogenic agents(bacteria) and eliminates unpleasant smells.
- Although various germs live in the water, the fetid microbes are hard to live in the water where Cluster is small, and due to its activated oxygen the self-cleansing power of the water will increased. Since the oxygen, as a catalyzer accelerating the chemical reactions such as dissolution, synthesis and oxidization, holds the bio-protection system that protects the matter from the mold and bacteria, it demonstrates antibacterial, bacteria-abolishing and deodorization effects for the bacteria, the cause for bad smell and deterioration in quality.

- As it contains no detergent, the washball reduce the pollution generated by waste washing machine water.

→ As stated above, the washball can reduce much more the pollution generated by waste water than the general detergent including synthetic detergent because it is made with ceramic materials under high temperature for laundry.