

## Introducing Neutral Anolyte Biocide

*An Effective, Green Biocide for Oil and Gas Applications*

Neutral Anolyte is an eco-friendly biocide that can replace the chemical biocides now used in frac fluids. Biocides are added to frac fluids to keep bacteria from producing hydrogen sulfide gas, scale, and slime in oil and gas formations and in the attendant tubulars (piping) and equipment. Unknown to most people, chemical biocides can be the single most hazardous ingredient in frac fluids.

Due to concerns over chemical biocides, Congress and the EPA are proposing ever-increasing regulations on frac operations. Oil and gas companies along with oil field service contractors are in a desperate search for alternative ways to kill bacteria. The few frac operators which have heard about and tested Neutral Anolyte have been impressed with the results. The challenge is that few of the companies currently offering Neutral Anolyte can meet the production demands of even the smallest frac operator

Unlike chemical disinfectants, Neutral Anolyte is an environmentally safe water-based biocide. It has been used in many parts of the world for decades as a hard-surface sanitizer. It is a more powerful disinfectant than chlorine bleach, hydrogen peroxide, and even ozone. It is equal to, and in some cases superior to, the chemical biocides now used in frac operations. Yet, amazingly, it poses no threat of harm to people, pets, or the environment.



Neutral Anolyte is made by the electro-chemical activation of water. Most people are more familiar with the expression “water electrolysis.” The process begins when water containing a little salt is passed between two electrically charged plates, an anode and a cathode. All of the electrolyzed by-products

eventually revert back into their natural state as water and other basic, naturally occurring elements. The shelf life is six months to a year.

The phenomenon of electro-chemical activation of water was discovered in Russia about 40 years ago. While most electrolyzers today use flat cell technology, round water cells give superior performance and are unsurpassed in ruggedness, efficiency, and longevity.



Round water electrolyzer cells provide the greatest area of electrode surface with the highest possible electrolysis efficiency. The anode and cathode consist of two tubular cylinders of titanium, one inside the other. A ceramic membrane separates the two. The membrane prevents mixing of the two electrolyzed water solutions that are co-produced.

Through the electro-chemical activation process, highly active reagents such as ozone, atomic oxygen, peroxide compounds, and chlorine dioxide are synthesized from the actual feed water. The high efficiency of round cell electrolyzers results in activated water that is a more effective biocide and more eco-friendly than chlorine, ozone, and other chemical disinfectants.

FracCure offers Neutral Anolyte biocide made from round cell technology. Contact us for more information on this amazing biocide.