

NEUTRAQUATTM

NeutraQuat™ is designed to neutralize the quaternary ammonium compounds (quats) often used as disinfectants in industrial sanitation that can negatively affect the performance of anaerobic and aerobic wastewater treatment. Quats are not broken down during anaerobic treatment which inhibit anaerobic bacteria leading to diminished BOD removal, reduced methane production, and reduction in the production of anaerobic granules in high-rate anaerobic wastewater systems. In aerobic wastewater treatment, the presence of quaternary ammonium compounds leads to biomass foaming, dispersion of biomass floc, diminished BOD removal, and loss of nitrification. The introduction of the quaternary ammonium neutralizing biochemical, NeutraQuat™, will bind up the free quaternary ammonium compounds and reduce their toxicity to anaerobic and aerobic wastewater biomass.

Helps With:

- Enhanced gas production
- Nitrification toxicity
- Quaternary ammonium compound toxicity

How It Works:

NeutraQuat™ attaches to the toxic alkyl chain of the quaternary ammonium compound (the shorter the alkyl chain length the more toxic the quat is, and the shorter alkyl chain length also makes it more apt to be bacterially biodegradable), thus reducing the quaternary ammonium compounds' potential toxicity in both anaerobic and aerobic waste streams and increasing its biodegradability in aerobic wastewater systems.

Benefits:

The utilization of **NeutraQuat**™ brings about a waste stream that is less negatively impacted biologically by the inclusion of quaternary ammonium compounds. This targeted blend of biochemicals aimed at the neutralization of quaternary ammonium compounds also neutralizes phenols, hexachlorophene, formalin, and ethanol. This neutralization supports growth of aerobic and anaerobic microorganisms and promotes a healthy bacterial environment.

In anaerobic wastewater systems **NeutraQuat**[™] helps with enhanced gas production, the formation of anaerobic granules and enhancement of BOD removal that has been compromised by the presence of quaternary ammonium compounds. In aerobic wastewater systems **NeutraQuat**[™] will reduce biomass foaming due to quaternary ammonium compounds, assist in reducing nitrification toxicity and improve overall biological treatment. **NeutraQuat**[™] does not contain anionic surfactant and will not adversely affect wet test results. Overfeeding will not harm system.

HYDRO SOLUTIONS, INC exists to provide solutions to customers in the air and water treatment industries. We are dedicated to offering customized plans, products, and services to ensure our customers meet their air and water discharge permits while operating their systems at optimum efficiency.

For more information regarding prevention or correction of nitrification loss, or other wastewater treatment solutions, visit hydrosolutions.com or contact our wastewater treatment specialists at 502-889-7107.

