

# DISSOLVER

## AN ELECTRON ACCEPTOR AND MICRONUTRIENT SOURCE

### Description

Microbial populations utilize electron acceptors that provide maximum free energy during respiration. accomplished by the use of **DISSOLVER** and **BRIGHTON INDUSTRIES** bacterial cultures when compared to traditional chemical oxidants such as hydrogen peroxide, chlorine, and potassium permanganate.

When added to an oxygen deficient primary system, **DISSOLVER** may also result in the reduction of BOD loadings to downstream secondary wastewater processes.

Sequentially, the preferred electron acceptor is dissolved oxygen (O<sub>2</sub>), followed by inorganic nitrate (NO<sub>3</sub>) and sulfate (SO<sub>4</sub>). As anaerobic conditions develop in a collection or treatment system, bacteria utilize NO<sub>3</sub> and SO<sub>4</sub> as an energy source. In the absence of nitrate, sulfate reduction occurs with the formation of H<sub>2</sub>S and its associated safety, odor, and corrosion problems.

**DISSOLVER** is a synergistic blend of a nitrogen based electron acceptor and micronutrients. **DISSOLVER** will promote preferential nitrate respiration over sulfate reduction in the presence of active microbial populations.

When used in conjunction with **Brighton Industries** selectively adapted bacterial cultures, **DISSOLVER** can reduce or eliminate H<sub>2</sub>S with its resulting odor and corrosion. Both safety and operating cost benefits can be

### FEATURES

- Safe to Handle: No strong oxidants or toxic chemicals.
- A nitrate nitrogen based electron acceptor for oxygen deficient systems.
- Preferential electron acceptor over indigenous sulfate reduction.

### BENEFITS

- Lower operating costs when compared to chemical oxidizing agents (e.g. H<sub>2</sub>O<sub>2</sub>, Cl<sub>2</sub>, KMnO<sub>4</sub>).
- A Preventative Method: Sulfate reduction to H<sub>2</sub>S does not occur.
- Eliminates or reduces H<sub>2</sub>S odor and related corrosion.
- Results in reduced oxygen demand in biological treatment systems.



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