As public health concern over antibiotic resistance and the need for food safety continues to grow, it is imperative to provide livestock clean water to reduce the need for antibiotics and control food safety pathogens. Terminal waterline disinfection enhances your biosecurity program and reduces cross-contamination between grow-outs.

WATERLINES

+ Penetrates and removes biofilm from animal drinking lines
+ Kills bacteria and resistant organisms found in waterlines
+ Prevents plugging of lines and nipple drinkers
+ Removes organics, slime and scale associated with biofilms
+ Reduces cross contamination between treated surfaces
+ Compatible with common waterline materials

**BACTERIAL TEST RESULTS (LOG)**

<table>
<thead>
<tr>
<th>TYPICAL CHEMISTRIES</th>
<th>RATIO</th>
<th>START</th>
<th>4 HRS</th>
<th>24 HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PerQuat</td>
<td>2.50%</td>
<td>5.60</td>
<td>1.29</td>
<td>&lt;1.00</td>
</tr>
<tr>
<td>Peroxide (35%)</td>
<td>3.00%</td>
<td>6.74</td>
<td>5.45</td>
<td>1.97</td>
</tr>
<tr>
<td>Bleach</td>
<td>0.78%</td>
<td>6.98</td>
<td>5.03</td>
<td>5.14</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>0.78%</td>
<td>7.56</td>
<td>7.52</td>
<td>7.33</td>
</tr>
<tr>
<td>Silver Stabilized Peroxide</td>
<td>0.78%</td>
<td>5.86</td>
<td>4.23</td>
<td>3.24</td>
</tr>
<tr>
<td>Silver Stabilized Peroxide</td>
<td>3.00%</td>
<td>5.87</td>
<td>3.00</td>
<td>&lt;1.00</td>
</tr>
</tbody>
</table>

*The Sterilex 2.5%... had the greatest reduction in APC with more than a 4 log reduction.*

— S. Watkins, University of Arkansas

**HARD SURFACE CLEANING AND DISINFECTION**

Sterilex offers the only product on the market specifically tailored to sanitize, disinfect and remove biofilm in animal drinking lines.

For use with:
- Equipment
- Environmental surfaces
- Drains

Kills pathogens and inactivates viruses including:
- *Escherichia coli*
- *Salmonella enterica*
- *Staphylococcus aureus*
- *Pseudomonas aeruginosa*
- *Campylobacter jejuni*
- *Aspergillus niger*
- *Avian influenza*
- *Newcastle disease virus*
- *Porcine epidemic diarrhea virus (PEDv)*
- Porcine reproductive and respiratory syndrome (PRRS)
- Rotavirus
THE CHEMISTRY

Sterilex's patented PerQuat technology is the first and only chemistry with products approved by the EPA to kill biofilm bacteria and remove biofilm in animal drinking lines. Active ingredients are based on quaternary ammonium compounds and hydrogen peroxide. An important role of quat is to serve as a phase transfer agent, combining with the peroxide ion to form a “PerQuat” molecule. This synergistic combination gives Sterilex products their unique biofilm penetration efficacy and provides a powerful level of performance through multiple physical and chemical mechanisms of action, including hydrolysis and oxidation.

PERQUAT TECHNOLOGY

+ EPA-registered disinfectant, sanitizer and virucide
+ Available in powder or liquid form

EFFECTS ON BIOFILM

Before/After Treatment with Various Biocides

Before PerQuat Technology

After PerQuat Technology

Before Bleach

After Bleach

Before Quaternary Ammonium

After Quaternary Ammonium

Before Glutaraldehyde

After Glutaraldehyde

The Power of PerQuat Technology

Polysaccharide matrix

PerQuat molecule penetrating matrix

PerQuat molecule breaking up biofilm using oxidation + hydrolysis

RECOGNITION OF FORTISOLVE

+ Recommended by top biofilm and infection control experts for remediation of biofilm on health care and institutional equipment
+ First company to receive “biofilm removal” claims for industrial and public health applications by US EPA
+ Clinically proven in numerous independent studies
+ “Biofilms Have a New Foil” published by USDA-ARS
+ Awarded “Bio Product of the Year” by the Technology Council of Maryland
+ Awarded USDA National Research Initiative Grant “Improved Methods for Control of Listeria Monocytogenes Within Biofilms in Meat and Poultry Processing Environments”

FortiSolve™ Product Family

A Two-Part Liquid Disinfectant

1.800.511.1659 | www.sterilex.com | marketing@sterilex.com

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