Synergex™: EPA-registered Sanitizer & Disinfectant

Synergex™ is the latest addition to the family of industry-leading antimicrobial products from Ecolab. This U.S. EPA-registered, mixed-peracid based sanitizer and disinfectant not only helps to address food safety and quality assurance, but also helps tackle operational and safety issues across your plant operations.

ENHANCE FOOD SAFETY & QUALITY ASSURANCE

- **Patented formulation** helps reduce day-to-day variability and promotes quality assurance
- **Powerful antimicrobial agent** helps protect against many pathogenic and environmental microorganisms as well as bacteriophage, broad yeast and mold
- **Antimicrobial Rinsing helps reduce spores** with proven efficacy for *Bacillus coagulans* and *Clostridium butyricum*-
- **In-line monitoring and control** allows for accurate and reliable sanitizer concentration

INCREASE PRODUCTIVITY

- **Simplified process** increases mineral solubility and reduces the need for acid wash and rinse
- **In-line monitoring and control** decreases dependence on manual titrations
- **Low pH use solution** efficiently aids in mineral, hard water and milk soil removal
- **Low foaming formulation** minimizes CIP cycle time

IMPROVE WORKER SAFETY & AIR QUALITY

- **Unique drum quick-connect closure** reduces employee exposure to concentrated product
- **Reduced total volatiles and oxidizer** helps improve air quality in the work environment compared to traditional mixed peracid and peroxyacetic acid sanitizers

MINIMIZE ENVIRONMENTAL IMPACTS

- **Up to 63% less peracid to effluent stream** reduces effluent impact compared to traditional peracid products
- **No-phosphorus formulation** helps minimize phosphate-related effluent fees
- **Potential elimination of acid rinse** helps save resources and reduces water consumption

*Antimicrobial Rinsing reduces the number of spores, but does not result in sterilization. Ecolab’s efficacy data to support the Antimicrobial Rinse claim are based on testing using the spore forms of *Bacillus coagulans* and *Clostridium butyricum* – the spore forms being more difficult to kill than vegetative forms (EPA Reg. No. 1677-250).
Quality Variability

**Reduces Quality Variability:** Percent of Milk Passing Organoleptic Testing at Code

![Graph showing reduction in variability](image)

<table>
<thead>
<tr>
<th>Time by Week</th>
<th>Variability Reduction: 41%</th>
</tr>
</thead>
</table>

Promotes Quality Assurance

**3 DAYS**

- **ADDITIONAL QUALITY ASSURANCE** for fresh milk

Productivity

**Saves Time & Increases Production:**

- High mineral solubility, and yeast and mold efficacy, enabled elimination of acid wash cycle, helping save water, energy and time.

**Case Study Results:**

Comparing the shorter cycle of the Synergex Wash to a normal wash, Synergex delivers noticeable savings.

**Synergex Wash**

- Rinse
- Caustic Heat Up
- Caustic Wash
- Acid Heat Up
- Acid Wash
- Rinse
- Sanitize

**Normal Wash**

- Rinse
- Caustic Heat Up
- Caustic Wash
- Acid Heat Up
- Acid Wash
- Rinse
- Sanitize

**CLEANING TIME (MIN)**

- 20
- 40
- 60
- 80

**TEMPERATURE ˚F**

- 160
- 140
- 120
- 100
- 80
- 60
- 40
- 20
- 0

**Saves Time & Increases Production:**

- Water Savings: Up to 24%
- Energy Savings: Up to 42%
- Time Savings: Up to 35%

Safety

**Helps Improve Worker Safety & Air Quality:**

- Reduced total volatiles and the unique drum quick-connect closure provide a safer work environment.

**Synergex Wash**

- Coupler
- Vent Port
- Locking Ring
- Shipping Plug (sold assembled with Drum Insert)
- Drum Insert
- Dip-tube

**APPLICATION AREA**

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
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</thead>
<tbody>
<tr>
<td>Non-Food Contact Surfaces</td>
</tr>
<tr>
<td>Floors, Walls, Tables, Chairs, Benches, Drains, Troughs, Drip Pans</td>
</tr>
<tr>
<td>Food Contact Surfaces</td>
</tr>
<tr>
<td>Fillers, Mixers, Conveyors, Equipment, Pipelines, Tanks, Vats, Evaporators &amp; Pasteurizers</td>
</tr>
<tr>
<td>Continuous Treatment of Food Conveyors</td>
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<tr>
<td>Food Conveyors During Processing</td>
</tr>
<tr>
<td>Sanitizing Hard, Non-Porous, Non-Edible Outside Surfaces of Air-tight Sealed Packages Containing Food or Non-Food Products</td>
</tr>
<tr>
<td>Air-tight Sealed Packages</td>
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<tr>
<td>Non-Porous Gloved Hands</td>
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<tr>
<td>Plastic, Latex or Other Synthetic Rubber Gloves</td>
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<tr>
<td>Entryway Sanitizing Systems (not approved in California)</td>
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<tr>
<td>Foam or Spray</td>
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<tr>
<td>Non-Food Contact Packaging Equipment</td>
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<tr>
<td>Non-Food Contact Packaging Equipment</td>
</tr>
<tr>
<td>Shoe Bath or Foam Sanitizing (not approved in California)</td>
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<tr>
<td>Boots and Shoes</td>
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*See product label for all application areas and Directions for Use.

To find out more, contact your Ecolab representative or call 1-800-392-3392.