WITH NEW
EPA CLAIM!

# SYNERGEX™

## An EPA-registered Sanitizer and Disinfectant

- Sanitizer
- Disinfectant
- COVID-19 Expected Efficacy*
- **NOW:** Food Contact Surface Biofilm Claims

*Synergex has demonstrated effectiveness against viruses similar to SARS-CoV-2 on hard, non-porous surfaces. Therefore, Synergex can be used against SARS-CoV-2 when used in accordance with the directions for use against Reovirus on hard, non-porous surfaces. Refer to the CDC website at cdc.gov/coronavirus for additional information.

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# SYNERGEX BENEFITS

## Significant, Measurable and Progressive Benefits

**FOOD SAFETY**

In-line monitoring enables accurate dosing & proof of delivery

**PRODUCT QUALITY**

Improved quality assurance through additional broad efficacy against yeast & mold

**PRODUCTIVITY**

Excellent mineral solubility helps reduce frequency of acid washes saving labor and resources

**SAFETY**

Safer dispensing, and a reduced exposure risk for employees

**AIR**

Reduced odor and total volatiles

**WASTE**

No phosphorous formulation, lower use of concentration reduces effluent impact

**DELIVERING RESULTS THAT MATTER TO YOU**

# SYNERGEX BENEFITS

## Significant, Measurable and Progressive Benefits

### FOOD SAFETY

Biofilm Reduction Claims at food contact, no rinse concentrations

In-line monitoring enables accurate dosing & proof of delivery

### PRODUCT QUALITY

Improved quality assurance through additional broad efficacy against yeast & mold

Reduces spoilage-causing organisms in biofilms that impact product shelf life

### PRODUCTIVITY

Excellent mineral solubility helps reduce frequency of acid washes saving labor and resources

### EMPLOYEE SAFETY

Safer dispensing, and a reduced exposure risk for employees

Reduced odor and total volatiles

### WASTE

No phosphorous formulation, lower use of concentration reduces effluent impact

### PUBLIC HEALTH

Expected efficacy SARS-CoV-2*

**DELIVERING RESULTS THAT MATTER TO YOU**

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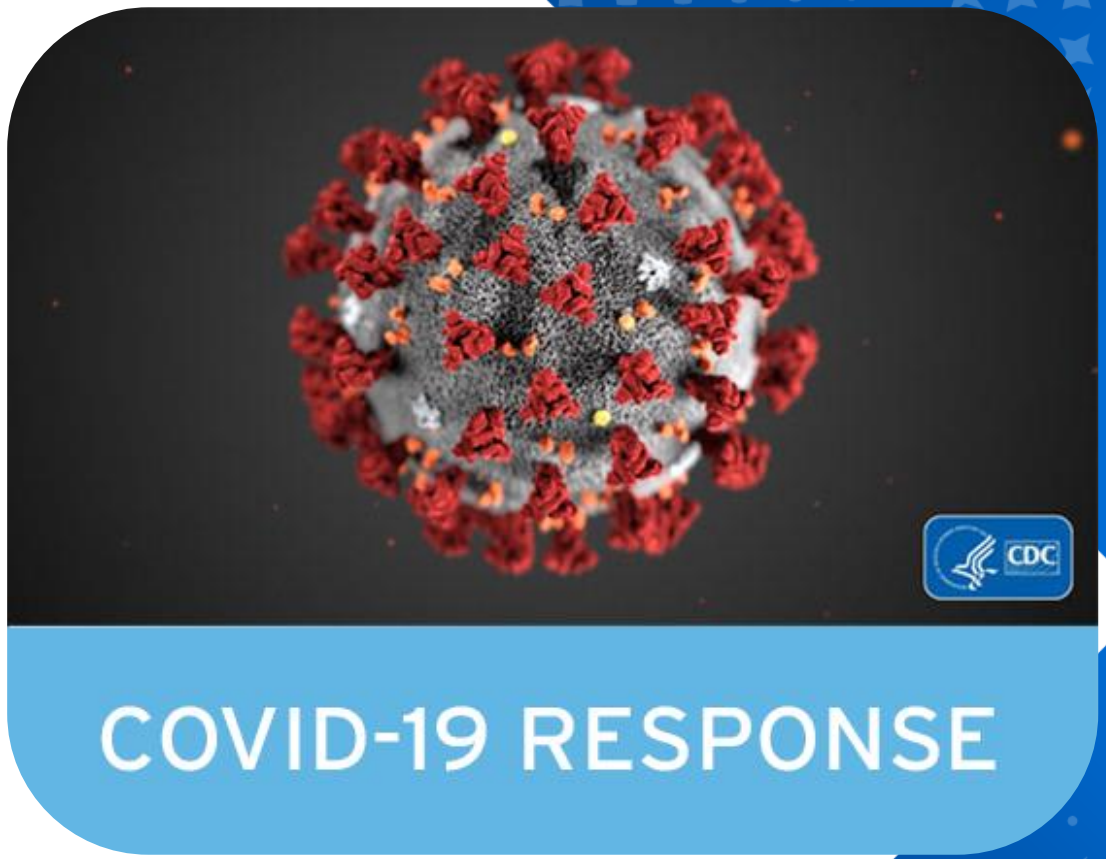
# Emerging pathogen claims

Synergex is expected to be effective against the emerging viral pathogen, SARS-CoV-2* at no-rinse concentrations**

Approved for use in US and Canada

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* Synergex has demonstrated effectiveness against viruses similar to SARS-CoV-2 on hard, non-porous surfaces. Therefore, Synergex can be used against SARS-CoV-2 when used in accordance with the directions for use against Reovirus on hard, non-porous surfaces. Refer to the CDC website at cdc.gov/coronavirus for additional information.

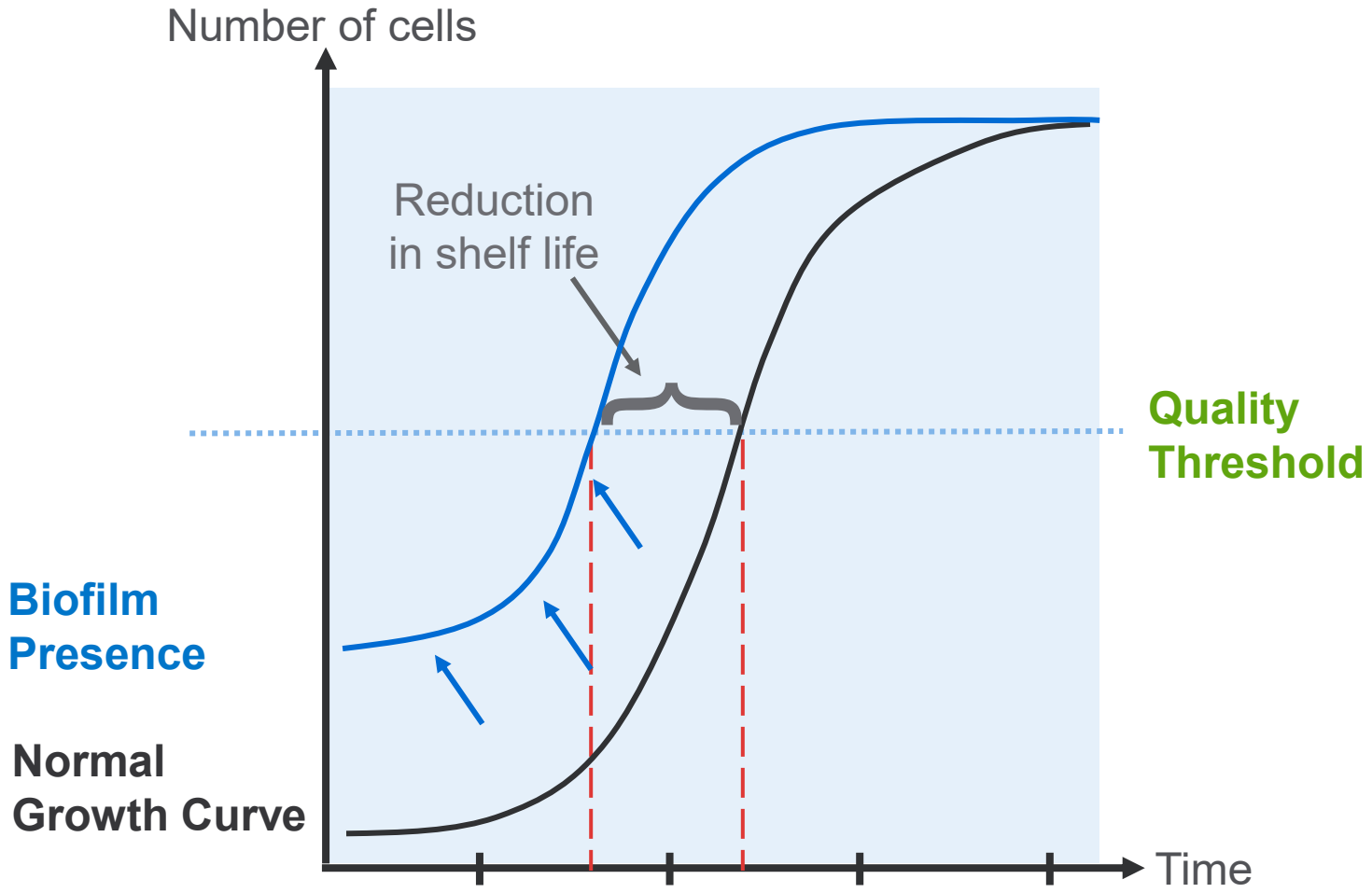
***When used in accordance with the directions for use against the listed supporting virus on hard, non-porous surfaces.*

# Biofilms: “A city of microbes”

“A biofilm is a complex, structured community of bacteria and other microorganisms attached to a surface. The population of a biofilm often undergoes morphological and metabolic changes, enabling microorganisms to survive in an otherwise inhospitable environment.”

Costerton *et al*, 1995. Ann Rev. Microbiol. 49: 711-745
Shi and Zhu, 2009. Trends in Food Sci. and Technol. 20: 407-413

# BIOFILMS IMPACT Organism Growth & Product Quality




**The presence of biofilms after cleaning provides a 'head start' for organism to grow, allowing micro levels to exceed the quality threshold sooner in the process.**

# New biofilm claims

| Biofilm Sanitizing Treatment | | |
|---|---|---|
| **Use Rate** | **Minimum Conditions for Use** | **Post-Treatment Rinse Requirement** |
| 1 fl. oz. / 4–4.5 gallons of [water] [tap water] [up to 500 ppm hard water] (0.173–0.195%, 1730–1950 ppm product) | 10 minutes (at a minimum of 33°C) | No rinse necessary |
| 1 fl. oz. / 4–4.5 gallons of [water] [tap water] [up to 500 ppm hard water] (0.173–0.195%, 1730–1950 ppm product) | 25 minutes (by immersion or CIP circulation) | No rinse necessary |
| 1.54–1.92 fl. oz. / 3 gallons of [water] [tap water] [up to 500 ppm hard water] (0.40–0.50%, 4000–5000 ppm product) | 5 minutes | Potable water rinse required |

1
2
3

## WHAT'S UNIQUE ABOUT THE CLAIMS?

1. **Kills biofilms** on hard, non-porous food contact surfaces
2. Achieve efficacy with **NO RINSE options!**
3. Minor changes to current SSOP required to achieve biofilm reduction

# Synergex Biofilm Claim Benefits

## BIOFILM CLAIM*

| Biofilm Sanitizing Treatment | | |
|---|---|---|
| **Use Rate** | **Minimum Conditions for Use** | **Post-Treatment Rinse Requirement** |
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1

**Penetrates & Kills** biofilms on hard, non-porous food contact surfaces.
**No Rinse Required!**

2

**EPA-approved** Sanitizer to destroy biofilms at sanitizer concentrations

3

Penetrates biofilms, **kills a minimum of 6 log of *Listeria monocytogenes* & *Pseudomonas aeruginosa*** as a no rinse sanitizer.

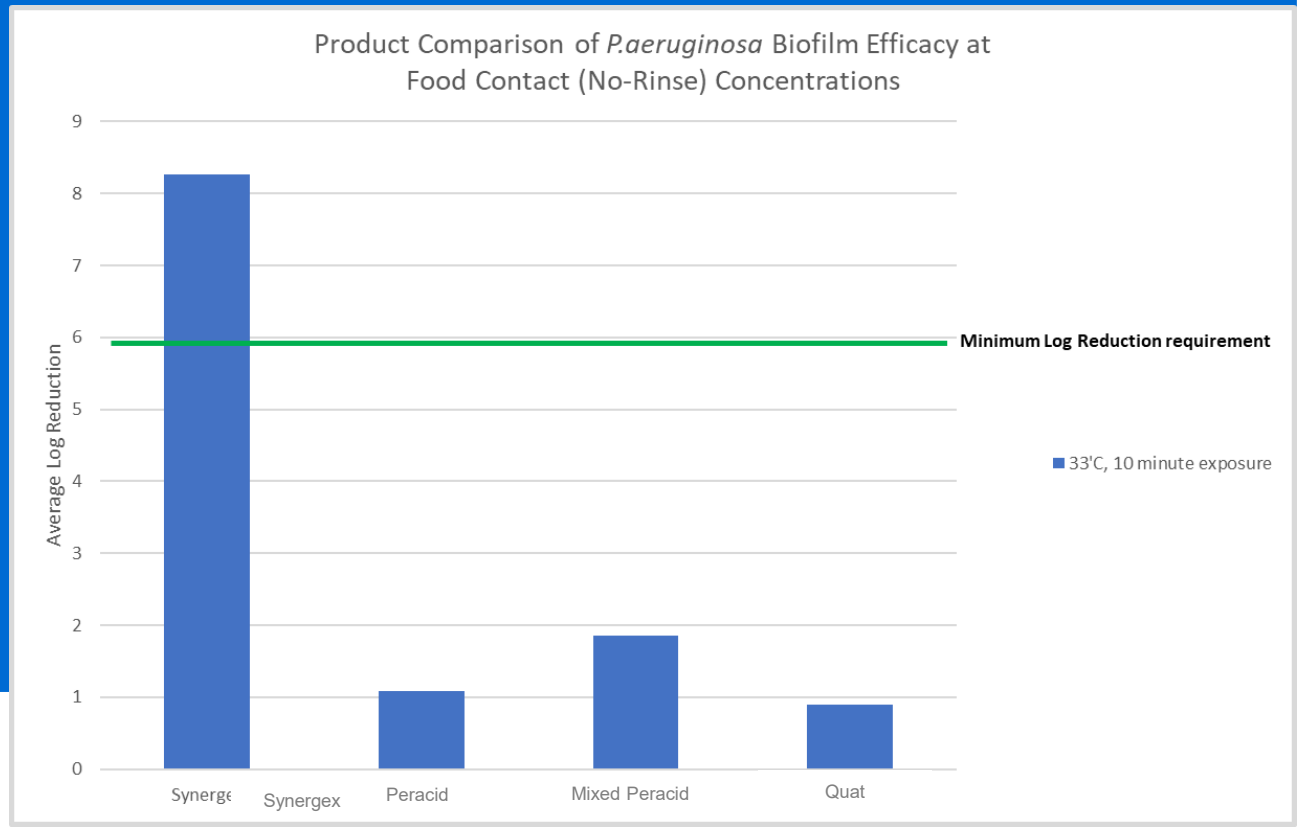
4

**Reduces prevalence of spoilage-causing organism** in biofilms that impact product shelf life.

# How did Synergex achieve these claims?

**Ecolab developed the EPA-approved testing method!**

**Synergex outperforms anything on the market!**

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PROTECTING WHAT'S VITAL™