Orbio® os3 MultiMicro™ 200* Efficacy Summary
Tested to United States EPA standards for disinfectants for use on hard non-porous surfaces

<table>
<thead>
<tr>
<th>ONE-STEP CLEANER-DISINFECTANT CLAIM</th>
<th>MICROORGANISM</th>
<th>RELEVANCE OF ORGANISM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BACTERICIDAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 10 minute exposure time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 5% organic soil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 400 ppm AOAC hard water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• AOAC Methods 955.15, 955.14, and 964.02&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Staphylococcus aureus</td>
<td>Efficacy is required by the EPA against these bacteria for broad-spectrum and hospital disinfectant claims.</td>
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<tr>
<td>Salmonella enterica</td>
<td></td>
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<tr>
<td>Pseudomonas aeruginosa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acinetobacter baumannii-MDR</td>
<td>Efficacy is demonstrated against these bacteria, which are resistant to many antibiotics including vancomycin, methicillin, and carbapenem, (multi-drug resistant).</td>
<td></td>
</tr>
<tr>
<td>Klebsiella pneumoniae-NDM-1, CRE</td>
<td>These bacteria cause different kinds of infections, including community-associated and nosocomial (healthcare-associated) infections, bloodstream (sepsis), and pneumonia.</td>
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<tr>
<td>Staphylococcus aureus, MRSA</td>
<td></td>
<td></td>
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<tr>
<td>Staphylococcus aureus VISA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterococcus faecalis VRE</td>
<td></td>
<td></td>
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<tr>
<td>Burkholderia cepacia</td>
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| **FUNGICIDAL**                     |               |                       |
| • 10 minute exposure time          |               |                       |
| • 5% organic soil                  |               |                       |
| • 400 ppm AOAC hard water          |               |                       |
| • AOAC Methods 955.15, 955.14, and 964.02<sup>2</sup> |               |                       |
| Trichophyton mentagrophytes        | Efficacy is required by the EPA against this fungus for claims against pathogenic fungi. |
| (Athlete’s Foot Fungus)            |               |                       |

| **VIRUCIDAL**                      |               |                       |
| • 10 minute exposure time          |               |                       |
| • 5% organic soil                  |               |                       |
| • 400 ppm AOAC hard water          |               |                       |
| • ASTM Method E-1053<sup>2</sup>   |               |                       |
| Poliovirus                         | Efficacy against poliovirus demonstrates virucidal activity against an organism that is highly resistant to inactivation by disinfectants. |
| Feline Calicivirus (Surrogate for Human Norovirus) | Efficacy against this virus demonstrates virucidal activity, which is recognized by the EPA for claims against Human Norovirus, which can cause gastroenteritis, also known as “food-poisoning” or “stomach-flu”. |
| Rhinovirus (Common Cold Virus)     | Efficacy against this virus demonstrates virucidal activity against a virus which can cause the common cold. |

| **NON ENVELOPED VIRUSES**          |               |                       |
| Bovine Viral Diarrhea virus (Surrogate for Human Hepatitis C virus) | Efficacy against these viruses demonstrates virucidal activity, which is recognized by the EPA for claims against the blood-borne pathogens Human Hepatitis C virus, and Human Immunodeficiency virus. |
| Human Immunodeficiency virus (HIV) |               |                       |
| Influenza A (H1N1) virus           | Efficacy against this virus demonstrates virucidal activity against a virus which can cause seasonal influenza and viral respiratory infections |
| Herpes Simplex virus (HSV-2)       | Efficacy against this virus demonstrates virucidal activity against a virus which can cause herpes. |

| **ENVELOPED VIRUSES**              |               |                       |

This document is intended to provide information about the efficacy testing for MultiMicro 200 performance. Information in the Relevance of Organism column is for educational purposes only, and is not intended to claim control or prevention of disease.
### FOOD CONTACT SURFACE SANITIZER

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<tr>
<th>CLAIM</th>
<th>MICROORGANISM</th>
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<tr>
<td>FOOD CONTACT SURFACE SANITIZER</td>
<td><em>Salmonella enterica Typhi</em></td>
<td>Efficacy indicates appropriate for use as a food contact surface sanitizer on pre-cleaned hard non-porous surface of food processing equipment, utensils, dishes, silverware, glasses, sink tops, countertops, refrigerated storage areas, display equipment and other hard non-porous surfaces in food processing areas or restaurants.</td>
</tr>
<tr>
<td>• 1 minute exposure time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 400 ppm AOAC hard water</td>
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<tr>
<td>• <em>AOAC Method 955.16</em>&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
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<tr>
<td>Listeria monocytogenes</td>
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### NON-FOOD CONTACT SURFACE SANITIZER

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<tbody>
<tr>
<td>NON-FOOD CONTACT SURFACE SANITIZER</td>
<td><em>Staphylococcus aureus</em></td>
<td>Efficacy indicates appropriate for use as a non-food contact surface sanitizer.</td>
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<td>• 5 minute exposure time</td>
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<td>• ASTM E-1153&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td><em>Enterobacter aerogenes</em></td>
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* MultiMicro 200 refers to MultiMicro disinfectant-sanitizer that has been diluted by the Orbio® os3 Dispenser to the ready-to-use form containing 200 ppm free available chlorine

1. Environmental Protection Agency (EPA), Office of Chemical Safety and Pollution Prevention, Product Performance Test Guidelines, OCSPP 810.2000 and OCSPP 810.2200
2. Environmental Protection Agency (EPA), Office of Chemical Safety and Pollution Prevention, Product Performance Test Guidelines, OCSPP 810.2000 and OCSPP 810.2300

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The os3 system is regulated as a pesticide device manufactured at EPA establishment number 090643-KY-001.