

# LAB RESULTS

PRODUCTS PUT TO THE TEST



**STUDY TITLE:** Germicidal and Detergent Sanitizing Action of Disinfectants  
**PROJECT NUMBER:** A09385 / A11304  
**TESTING LABORATORY:** ATS Labs

The 2.5 pH Strong Acidic Water produced by the Enagic® Super501 Water Ionizer\* was tested for effectiveness in killing five different types of bacteria: Staph, E-Coli, Salmonella, MRSA & CRKP.



Enagic® Super501



## SUMMARY OF PROTOCOLS

### Test Substance:

Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000

### Test Organisms:

*Staphylococcus aureus* (ATCC 6538)

*Escherichia coli* (ATCC 11229)

*Salmonella typhi* (ATCC 6539)

### Methicillin Resistant

*Staphylococcus aureus* – MRSA (ATCC 33592)

Carbapenem Resistant *Klebsiella pneumoniae* – CRKP (ATCC BAA-1705)

### Exposure Time:

30 seconds

### Exposure Temperature:

Room temperature (20.0°C)

### Organic Soil Load:

5% fetal bovine serum

## SUMMARY OF ANALYSIS

**STAPH:** Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000, demonstrated a >99.999 percent reduction of *Staphylococcus aureus*, following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**E-COLI:** Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000, demonstrated a >99.999 percent reduction of *Escherichia coli*, following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**SALMONELLA:** Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000, demonstrated a >99.999 percent reduction of *Salmonella typhi*, following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**MRSA:** Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000, demonstrated a >99.999 percent reduction of Methicillin Resistant *Staphylococcus aureus* – MRSA, following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**CRKP:** Enagic Super 501 Strong Acidic Water 2.5 pH, Machine 1 (Serial #: 87100333) Lot # 1 and Machine 2 (Serial #: 87100339) Lot # 2 with pre-filter C-1000, demonstrated a >99.999 percent reduction of Carbapenem Resistant *Klebsiella pneumoniae* – CRKP following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

## SUMMARY OF EFFICACY RESULTS



**STAPH:** Enagic Super 501 Strong Acidic Water 2.5 pH demonstrated efficacy of two lots against *Staphylococcus aureus*, and therefore, meets the requirements set forth by the U.S. EPA for sanitizer label claims following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**E-COLI:** Enagic Super 501 Strong Acidic Water 2.5 pH demonstrated efficacy of two lots against *Escherichia coli*, and therefore, meets the requirements set forth by the U.S. EPA for sanitizer label claims following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**SALMONELLA:** Enagic Super 501 Strong Acidic Water 2.5 pH demonstrated efficacy of two lots against *Salmonella typhi*, and therefore, meets the requirements set forth by the U.S. EPA for sanitizer label claims following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**MRSA:** Enagic Super 501 Strong Acidic Water 2.5 pH demonstrated efficacy of two lots against Methicillin Resistant *Staphylococcus aureus* – MRSA, and therefore, meets the requirements set forth by the U.S. EPA for sanitizer label claims following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.

**CRKP:** Enagic Super 501 Strong Acidic Water 2.5 pH demonstrated efficacy of two lots against Carbapenem Resistant *Klebsiella pneumoniae* – CRKP, and therefore, meets the requirements set forth by the U.S. EPA for sanitizer label claims following a 30 second exposure time at room temperature (20.0°C) in the presence of a 5% fetal bovine serum organic soil load.



\* No other water ionizer brands were tested because the Enagic® water ionizers were the only ones capable of producing 2.5 pH Strong Acidic Water.