**Supporting Information**

**Table S1:** Efficacy of electrolyzed oxidizing water treatments on specific pathogens in suspension

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| --- | --- | --- | --- | --- |
| **Pathogen** | **Matrix/Active agent** | **Dose/contact time** | **Log reduction** | **Reference** |
| *Escherichia coli* | PBS/  SAEW (20:1) | 5–10 min; 60 ppm ACC; ORP +910 mV; pH 6.4; volume ratio 20:1 | ~8 log CFU/mL | Ye et al 2017 |
| *E. coli* | TSB/  NEW (0.1/9.9 mL) | 10 min; 20–100 ppm total residual chlorine; ORP +800-900 mV; pH 6.3–6.5; 25°C | 6.1–6.7 log CFU/mL | Guentzel et al 2008 |
| *E. coli* | 0.85% NaCl/  LcEW (1/9 mL) | 1 min; 5–10 mg/L ACC; ORP +660–700 mV; pH 6.8–7.4 | 4.9–5.3 log CFU/mL | Rahman et al 2012 |
| *E. coli* O157:H7 | aCulture/sterile water/NEW (1/1/8 mL) | 5 min; 89 mg/L ACC; pH 7.99–8.19; ORP +745–771 mV; 23°C | >6 log CFU/mL | Deza et al 2003 |
| *E. coli* (range of strains) | NECAW | 30 s; 100 ppm FAC; ORP +864 mV; pH 7.0 | >5 log CFU/mL | Yang et al 2013 |
| *Salmonella* (range of strains) | NECAW | 30 s; 100 ppm FAC; ORP +864; pH 7.0 | >5 log CFU/mL | Yang et al 2013 |
| *Salmonella enteritidis* | Culture/sterile water/NEW (1/1/8 mL) | 5 min; 89 mg/L ACC; pH 7.99–8.19; ORP +745–771 mV; 23°C | >6 log CFU/mL | Deza et al 2003 |
| *Listeria monocytogenes* | Culture/sterile water/NEW (1/1/8 mL) | 5 min; 89 mg/L ACC; pH 7.99–8.19; ORP +745–771 mV; 23°C | >6 log CFU/mL | Deza et al 2003 |
| *Listeria monocytogenes* (range of strains) | PW/NECAW (1/99 mL) | 30 s; 50–100 ppm FAC; ORP +824–864; pH 7.0 | >5 log CFU/mL | Yang et al 2013 |
| *Listeria innocua* | Cells resuspended in NEW | 10 min; 150 ppm ACC; ORP +840 mV; pH 6.9; 23°C | 2.7 log CFU/mL | Feliciano et al 2012 |
| *Listeria innocua* | Cells resuspended in AEW | 10 min; 150 ppm ACC; ORP +1100 mV; pH 2.7; 23°C | 4.7 log CFU/mL | Feliciano et al 2012 |
| *Listeria monocytogenes* | TSB/  NEW (0.1/9.9 mL) | 10 min; 20–100 ppm total residual chlorine; ORP +800–900 mV; pH 6.3–6.5; 25°C | 6.1–6.7 log CFU/mL | Guentzel et al 2008 |
| *Listeria monocytogenes* | 0.85% NaCl/  LcEW (1/9 mL) | 1 min; 5–10 mg/L ACC; ORP +660–700 mV; pH 6.8–7.4 | 5.2–5.6 log CFU/mL | Rahman et al 2012 |
| *Listeria monocytogenes* | 0.85% NaCl/NEW (1/9 mL) | 30 s; 20 ppm total chlorine concentration; ORP +1100 mV; pH 7.0; 30°C | ≥5 log CFU/mL | Arevalos-Sanchez et al 2012 |

NEW: neutral electrolyzed water; AEW: acidic electrolyzed water; SAEW: slightly acidic electrolyzed water; CFU: colony forming unit; ACC: available chlorine concentrations; NECAW: neutral electrochemically activated water; LcEW: low concentration electrolyzed water; ORP: oxidation-reduction potential; PBS: phosphate buffered saline; TSB: trypticase soy broth; PW: peptone water

a details of culture medium not provided.

**References to Table S1:**

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