

Supplementary Material

Table S1. Exposure of biofilms grown on borosilicate glass to ozonated water at 2, 5 and 7 ppm dissolved ozone for 10 minutes

Exposure	Sample 1			Sample 2			Sample 3			Average log ₁₀ CFU/cm ²	Log Reduction
	Average dissolved O ₃ , ppm*	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²		
Control	NA**	1.20x10 ⁸	8.080	NA	1.76x10 ⁸	8.246	NA	4.46x10 ⁸	8.649	8.325	NA
2ppm	1.9 ± 0.2	3.68x10 ⁷	7.566	1.9 ± 0.2	2.62x10 ⁷	7.418	2.1 ± 0.2	4.75x10 ⁷	7.676	7.553	0.77
5ppm	5.1 ± 0.1	4.07x10 ⁴	4.609	5.0 ± 0.3	3.00x10 ⁷	7.478	5.0 ± 0.2	1.19x10 ⁷	7.076	6.388	1.94
7ppm	7.8 ± 0.7	< 4.84x10 ¹	< 1.685	7.6 ± 0.5	3.58x10 ⁴	4.554	7.2 ± 0.4	8.72x10 ⁶	6.940	<4.393	>3.93

* Dissolved ozone concentration was measured every 2 minutes during exposure of biofilm coupons to ozonated water

** Not Applicable

Table S2. Exposure of biofilms grown on borosilicate glass to ozonated water at 2 and 5 ppm dissolved ozone for 20 minutes

Exposure	Sample 1			Sample 2			Sample 3			Average log ₁₀ CFU/cm ²	Log Reduction
	Average dissolved O ₃ , ppm*	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²		
Control	NA**	2.00x10 ⁷	7.300	NA	3.09x10 ⁶	6.490	NA	1.04x10 ⁷	7.016	6.935	NA
2ppm	1.9 ± 0.3	4.84x10 ⁵	5.685	2.1 ± 0.3	<4.84x10 ¹	<1.685	2.1 ± 0.1	<4.84x10 ¹	<1.685	<3.019	>3.92
5ppm-1	5.0 ± 0.3	<4.84x10 ¹	<1.685	5.0 ± 0.3	<4.84x10 ¹	<1.685	5.1 ± 0.4	<4.84x10 ¹	<1.685	<1.685	>5.25
5ppm-2	5.0 ± 0.4	<4.84x10 ¹	<1.685	4.7 ± 0.2	<4.84x10 ¹	<1.685	4.9 ± 0.3	<4.84x10 ¹	<1.685		

* Dissolved ozone concentration was measured every 2 minutes during exposure of biofilm coupons to ozonated water

** Not Applicable

Table S3. Exposure of biofilms grown on various materials to ozonated water at 5 ppm dissolved ozone for 20 minutes

Material		Exposure	Sample 1			Sample 2			Sample 3			Average log ₁₀ CFU/cm ²	Log Reduction
			Average dissolved O ₃ , ppm*	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²	Average dissolved O ₃ , ppm	CFU/cm ²	log ₁₀ CFU/cm ²		
Hydro- phylic	Glass-1	Control	NA**	2.40x10 ⁶	6.381	NA	7.36x10 ⁷	7.867	NA	-***	-***	7.124	NA
		5ppm	5.0 ± 0.3	<4.84x10 ¹	<1.685	5.0 ± 0.2	<4.84x10 ¹	<1.685	4.8 ± 0.2	<4.84x10 ¹	<1.685	<1.685	>5.44
	Glass-2	Control	NA**	4.26x10 ⁷	7.630	NA	-***	-***	NA	5.33x10 ⁸	8.727	8.178	NA
		5ppm	5.4 ± 0.5	<4.84x10 ¹	<1.685	5.0 ± 0.1	<4.84x10 ¹	<1.685	4.8 ± 0.8	<4.84x10 ¹	<1.685	<1.685	>6.49
	Ceramics	Control	NA**	3.58x10 ⁸	8.554	NA	2.85x10 ⁸	8.455	NA	3.00x10 ⁸	8.478	8.496	NA
		5ppm	5.0 ± 0.3	5.04x10 ⁶	6.702	5.2 ± 0.2	4.36x10 ⁷	7.639	5.1 ± 0.3	3.10x10 ³	3.491	5.944	2.55
Hydro- phobic	UHMWPE	Control	NA**	1.09x10 ⁷	7.035	NA	1.42x10 ⁷	7.154	NA	1.20x10 ⁷	7.080	7.090	NA
		5ppm	4.9 ± 0.5	<4.84x10 ¹	<1.685	5.1 ± 0.2	3.97x10 ⁴	4.599	4.7 ± 0.1	<4.84x10 ¹	<1.685	<2.656	>4.44
	PEEK	Control	NA**	4.66x10 ⁶	6.649	NA	7.75x10 ⁶	6.889	NA	6.39x10 ⁶	6.806	6.781	NA
		5ppm	5.0 ± 0.4	<4.84x10 ¹	1.685	5.0 ± 0.3	<4.84x10 ¹	1.685	4.9 ± 0.3	3.88x10 ²	2.588	<1.986	>4.79
	HALAR	Control	NA**	2.31x10 ⁸	8.365	NA	7.69x10 ⁶	6.886	NA	8.80x10 ⁶	6.944	7.398	NA
		5ppm	4.8 ± 0.2	<4.63x10 ¹	<1.666	4.8 ± 0.1	9.26x10 ¹	1.967	4.7 ± 0.2	1.85x10 ²	2.268	<1.967	>5.43
	ETFE	Control	NA**	3.10x10 ⁷	7.491	NA	6.78x10 ⁶	6.831	NA	6.39x10 ⁸	8.806	7.709	NA
		5ppm	4.9 ± 0.3	<4.84x10 ¹	<1.685	4.7 ± 0.1	5.91x10 ³	3.772	4.6 ± 0.1	<4.84x10 ¹	<1.685	<2.381	>5.33
	PVDF	Control	NA**	5.13x10 ⁹	9.710	NA	1.11x10 ⁹	9.047	NA	9.88x10 ⁸	8.995	9.251	NA
		5ppm	4.9 ± 0.2	4.55x10 ³	3.658	5.2 ± 0.2	7.75x10 ⁵	5.889	4.9 ± 0.2	3.88x10 ²	2.588	4.045	5.21

* Dissolved ozone concentration was measured every 2 minutes during exposure of biofilm coupons to ozonated water

** Not Applicable

*** Coupon was dropped