

Supplementary Information for the AMB Express Manuscript:

Sterilization of Hydrogen Peroxide Resistant Bacterial Spores with Stabilized Chlorine Dioxide

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Running headline: Spore killing by chlorine dioxide

TABLE S1 Plate counting of *B. pumilus* SAFR-032 spores, one-hour exposure time

		CFU (by serial dilution) [†]					
		10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁴	10 ⁻⁵	10 ⁻⁶
Control	A	TNTC	TNTC	TNTC	TNTC	79	8
	B	TNTC	TNTC	TNTC	TNTC	109*	5
Peroxide, 3.5%	A	TNTC	TNTC	TNTC	181	6	2
	B	TNTC	TNTC	TNTC	113	5	2
Inactive Oxine	A	TNTC	TNTC	TNTC	298	27	7
	B	TNTC	TNTC	TNTC	260	16	0
Active Oxine	A	201	14	0	0	1	0
	B	TNTC	18	1	1	0	0*

Table S1. Plate counting of post-Oxine®-exposure *B. pumilus* SAFR-032 spores exposed on aluminum coupons using serial dilutions, on TSA plates. Exposure time to Oxine® was 1h; results shown are at 24h incubation time. Inactivated Oxine® concentration = 108.5 ppm ClO₂. Activated Oxine® concentration = 70.4 ppm total ClO₂, 39 ppm free ClO₂. A and B are duplicate platings. TNTC = too numerous to count (>300 colonies total or >100 colonies in one quarter of plate). * = plate appeared damaged or contaminated. † = '10⁻¹' represents plating of spores directly after ultrasonication (into 10 mL sodium thiosulfate, effective dilution 100:1); remaining dilutions are 10:1 dilutions into PBS.

TABLE S2 Plate counting of *B. pumilus* SAFR-032 spores, 24-hour exposure time

		CFU (by serial dilution) †					
		10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁴	10 ⁻⁵	10 ⁻⁶
Control	A	TNTC	TNTC	TNTC	TNTC	31	2*
	B	TNTC	TNTC	TNTC	TNTC	20	2
Peroxide, 3.5%	A	0	0	0	0	0	0
	B	1	0	0	0	0	0
Inactive Oxine	A	TNTC	TNTC	TNTC	TNTC	48*	8
	B	TNTC	TNTC	TNTC	TNTC	78	3
Active Oxine	A	3	0	0	0	0	0
	B	3	0	0	0	0	0

Table S2. Plate counting of post-Oxine®-exposure *B. pumilus* SAFR-032 spores via serial dilution onto TSA plates. Oxine® concentrations are equal to those in Table S1. Exposure time was 24h with counting after 24h incubation. TNTC = too numerous to count (>300 colonies per plate or >100 colonies in one quarter of plate). * = agar plate appeared damaged or contaminated. † = '10⁻¹' represents plating of spores directly after ultrasonication (into 10 mL sodium thiosulfate, effective dilution 100:1); remaining dilutions are 10:1 dilutions into PBS.