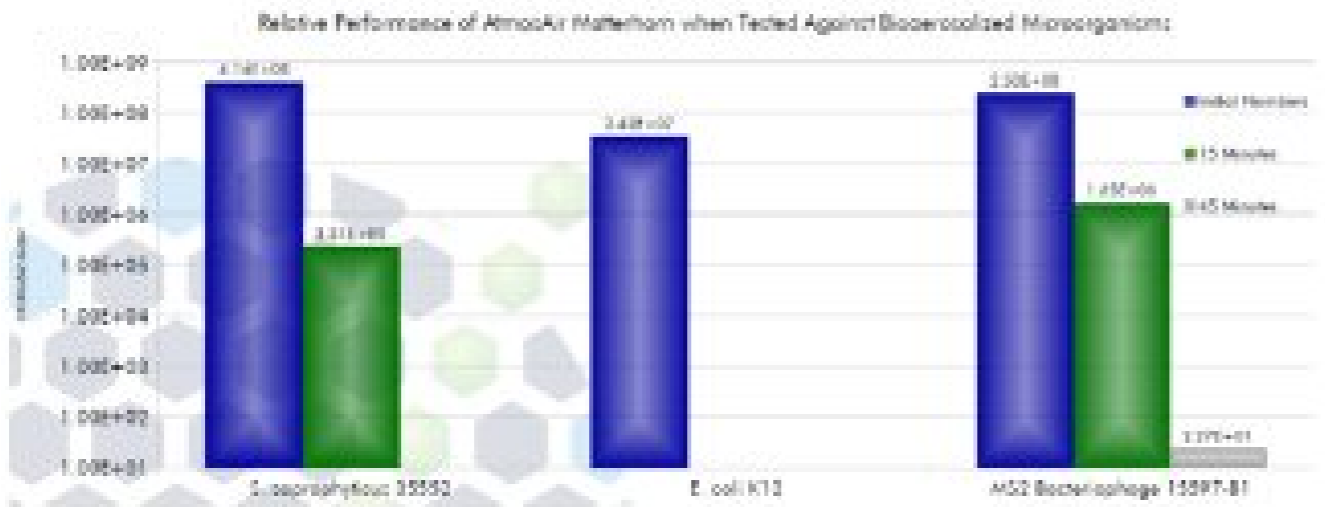


# Microbial Reduction – Measurable Results

Both in the lab and in the field, AtmosAir has proven testing results to reduce micro-organisms

Source Guangdong Detection Center of Microbiology Reduction of Influenza H1N1 of 99.99% in 2 hours with AtmosAir Operating



Report No.: 2020FM12168R01E

Virus	Action Time	Serial Number	Air virus content (TCID <sub>50</sub> /m <sup>3</sup> )	Removal rate (%)
H1N1 <i>Influenza A virus</i> (A/PR/8/34) Host cell: MDCK	0 (CK)	1	4.07 × 10 <sup>6</sup>	
		2	4.07 × 10 <sup>6</sup>	
		3	3.24 × 10 <sup>6</sup>	
	2h	1	<1.62 × 10 <sup>2</sup>	>99.99
		2	<1.62 × 10 <sup>2</sup>	>99.99
		3	<1.62 × 10 <sup>2</sup>	>99.99

Source ATL Laboratories Round Rock TX Over 99% Reduction to aerosolized staph, e-coli and MS2 in 15 Minutes with AtmosAir Operating

Table 2: Test Results at 30 minutes

	Test Results Replicate 1 30 minutes	Test Results Replicate 2 30 minutes	Test Results Replicate 3 30 minutes
Cell Control	0 0 0 0	0 0 0 0	0 0 0 0
Dilution	10 <sup>-1</sup>	0 0 0 +	0 0 0 +
	10 <sup>-2</sup>	0 0 0 0	0 0 0 0
	10 <sup>-3</sup>	0 0 0 0	0 0 0 0
	10 <sup>-4</sup>	0 0 0 0	0 0 0 0
	10 <sup>-5</sup>	0 0 0 0	0 0 0 0
TCID <sub>50</sub> per 0.1 ml	0.75 Log <sub>10</sub>	0.75 Log <sub>10</sub>	≤0.50 Log <sub>10</sub>
TCID <sub>50</sub> per Carrier	1.05 Log <sub>10</sub>	1.05 Log <sub>10</sub>	≤0.80 Log <sub>10</sub>
Average Log <sub>10</sub> Reduction	2.78 Log <sub>10</sub>		
Average Percent Reduction	99.92%		

Source MicroChem Laboratories Round Rock TX Over 99.9% Reduction of Coronavirus 229E in 30 minutes with AtmosAir Operating Testing performed to ASTM 1053

Key: + = Virus recovered; 0 = Virus not recovered and/or no cytotoxicity observed; T = Cytotoxicity observed. \*Taking cytotoxicity and neutralization controls into account.  
11/23/2022

Test Device	Test Microorganism	Carrier Control/Treatment	Replicate of Control Time Point	CFU/Carrier	Average CFU/Carrier	Percent Reduction Compared to Control at Contact Time	Log <sub>10</sub> Reduction Compared to Control at Contact Time
Matterhorn	<i>C. difficile</i> 43598 (Enterogenes)	Numbers Control	6 hours	3.60E+06	N/A	N/A	N/A
			18 hours	4.50E+06			
			24 hours	3.60E+06			
		6 hours	1	1.19E+06	1.53E+06	57.59%	0.37
			2	1.38E+06			
			3	2.01E+06			
		18 hours	1	2.50E+03	3.33E+03	99.93%	3.13
			2	5.20E+03			
			3	2.30E+03			
		24 hours	1	1.51E+03	8.17E+02	99.98%	3.64
			2	1.30E+02			
			3	8.10E+02			

The limit of detection for this assay is 1.00E+01 results below the limit of detection are reported as <1.00E+01.

Source MicroChem Laboratories Round Rock TX Over 99.9% Reduction of surface C-Difficile in 24 hours with AtmosAir Operating Testing performed to ASTM 1153