

# In Vitro Studies

Challenge Microorganism (ATCC #)	Initial Population (CFU/ml)	Exposure time (Min)	Post-Exposure Population (CFU/ml)	Log <sub>10</sub> Reduction	Percent Reduction
<i>Staphylococcus aureus</i> MRSA (29213)	2.375 x 10 <sup>9</sup>	1	< 1.00 x 10 <sup>3</sup>	6.3757	99.9999
<i>Streptococcus pneumoniae</i> (33400)	9.050 x 10 <sup>8</sup>	1	< 1.00 x 10 <sup>3</sup>	4.9566	99.9989
<i>Streptococcus pyogenes</i> (12344)	3.250 x 10 <sup>9</sup>	1	< 1.00 x 10 <sup>3</sup>	6.5119	99.9999
<i>Mycobacterium smegmatis</i> (33592)	2.065 x 10 <sup>9</sup>	1	< 1.00 x 10 <sup>3</sup>	6.3149	99.9999
<i>Rhinovirus</i> Type 14 (VR-284)	8.335 x 10 <sup>9</sup>	1	3.835 x 10 <sup>3</sup>	4.3371	99.9940
<i>Haemophilus influenzae</i> (9006)	2.440 x 10 <sup>9</sup>	1	< 1.00 x 10 <sup>3</sup>	5.3874	99.9996

When exposed to an undiluted solution of Nozin® Nasal Sanitizer® antiseptic for one (1) minute, microbial populations were reduced nearly 100 percent. No viable microorganisms could be detected within limits of the test.