

Stop the Growth of Legionella Pneumophila 33156

Study 3. Reduction of Legionella pneumophila (ATC #33156) on tin coupons with antimicrobial paint coatings. Stainless steel coupons were also included as controls. Experiment was conducted under moist conditions (no drying; t=0 collected immediately upon inoculation).

Treatment	(24 hour) percent reduction	(48 hour) percent reduction
Control Stainless Steel	73 %	67 %
SB Antimicrobial	99.8 %	99.9 %
Silver Bullet AM	99.8 %	99.9 %

Conclusions

After 48 hours of exposure, average reductions of $> 5.21\text{-log}_{10}$ were observed on both the black and silver paint coatings. These reductions were statistically significant (noted by "+" in the table) in comparison to the 2.36-log_{10} average reduction observed for the stainless steel controls after 48 hours. These correspond to a $> 99.9994\%$ reduction in comparison to the control.

An antimicrobial surface coating has the potential to act on bacteria over prolonged periods and facilitate an overall reduction in bacterial numbers on such surfaces over time, thus reducing the risk of the human exposure.



Tests Conducted By: Kelly R. Bright, Ph.D
Water & Energy Sustainable Tech Center • The University of Arizona • August 19, 2019

HVAC Ductwork



Silver Bullet AM™
HVAC Black Epoxy Coating



Silver Bullet AM™
HVAC White Epoxy Coating



Silver Bullet AM™ 316 Stainless
Steel HVAC Epoxy Coating



Silver Bullet AM™
Clear Epoxy Coating



Prime Solution
5250 / 5253 Primer



Silver Bullet AM™ Clear Acrylic
Antimicrobial Aerosol Paint



BC-4000 Industrial
Metal Cleaner



BC-7000 Heavy Duty
Aluminum Cleaner & Etch