



SafetyTies - The Secret Weapon

RESEARCH FACT SHEET

A 100% silk necktie that repels everyday liquids including coffee, water and red wine, is stain-resistant, holds up well to dry cleaning, and even resists wrinkles... that would be some necktie wouldn't it ? But what if there was an extra added feature that could aid in stopping the spread of bacteria, one that could benefit such diverse professions as physicians and health care professionals, educators, and even the hospitality and food service industry ?

That's right! In addition to the attributes listed above, SafetyTies are anti-microbial!

Check out the results from our latest battery of independent testing and see what makes SafetyTies the hardest working neckties around!

Recovery of *Salmonella* from SafetyTies and regular silk ties after microbiological challenge experiments

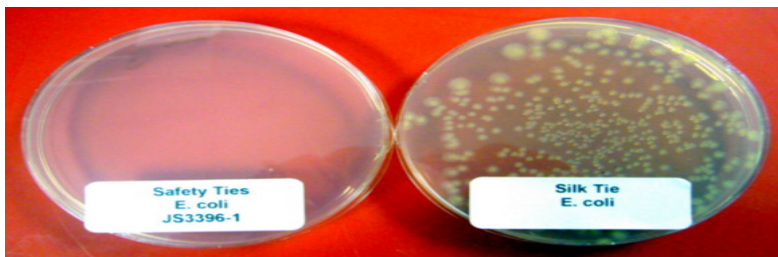
Tie Sample	CFU/ml extracted from inoculated tie sections	
	TOP	BOTTOM
Untreated	1.8 x10 ⁴	2.3 x 10 ⁴
JS3396-1	<10	<10
JS3395-7	<10	<10
JS3384-6	<10	<10
JS2623-2	<10	<10

SafetyTies were submitted to microbiological challenge experiments. The 100% silk nano-treated material showed an excellent ability to repel bacterial contamination and demonstrated anti-microbial properties. SafetyTies inoculated with *E. Coli* and *Salmonella* showed a greater than 99.99% reduction in bacterial growth compared to standard 100% silk neckties inoculated with the same concentration of bacteria.

SafetyTies also underwent bacterial challenge with gram-positive bacilli. SafetyTies nano-treated silk fibers demonstrated an excellent ability to repel 98% of *methicillin-resistant Staphylococcus aureus* and 99.5% of *vancomycin-resistant enterococci* when compared to standard 100% silk neckties.

SafetyTies have also been found to be 100% safe! Cytotoxicity testing and analysis shows that the nano coating stays where it belongs - on your necktie! During testing, there were no adverse effects to any cultured cells exposed to safetyTies and its nano treatment.

*Independent studies performed at BCS Laboratories, Inc. Gainesville, Florida , FL DOH Laboratory #E82924, EPA # FL 01147



**Choose SafetyTies, and choose
the hardest working neckties around!**