



**BIOPROTECT Antimicrobial
Testing Data 2020**

DATE	NAME	LABORATORY	TEST METHOD	REPORT #	PRODUCT TESTED	ORGANISM TESTED	RESULTS
11/19/2009	Bob Barker 100 Wash Test	Precision Testing Lab 313 Hill Ave. Nashville, TN 37210 Ph: 615-254-3401	ASTM E2149	85479	BIOPROTECT 500	<i>Staphylococcus Aureus</i> (ATCC #6538)	The BP treated shirts and pants showed a 99.99% reduction (4 log kill) in Staph after 100 washings.
2/19/2010	BP 500 vs. E.Coli 90 Day Test	Microbac Laboratories, Inc. 115 Corporation Way Venice, FL 34285 Ph: (941) 484-6508	SM 9215B	1003-00285	BIOPROTECT 500	<i>E. Coli</i>	The untreated surface with E. Coli showed an initial count of 740,000 cfu's and the BP 500 treated surface showed an initial count of less than 10 cfu's. At Day 90 the untreated surface showed a count of 1,400,000 cfu's of E. Coli whereas the BP 500 treated surface showed a count of less than 10 cfu's of E. Coli. Thus proving that BP 500 continued working in the dry state for 90 days.
2/19/2010	BP 500 vs. MRSA 90 Day Test	Microbac Laboratories, Inc. 115 Corporation Way Venice, FL 34285 Ph: (941) 484-6508	SM 9215B	1003-00284	BIOPROTECT 500	MRSA	The untreated surface with MRSA showed an initial count of 700,000 cfu's and the BP 500 treated surface showed an initial count of 90 cfu's. At Day 90 the untreated surface showed a 1,200,000 cfu count of MRSA whereas the BP 500 treated surface showed a count of 150 cfu's. Thus proving that BP 500 continued working in the dry state for 90 days.
2/19/2010	BP 500 vs. Pseudomonas 90 Day Test	Microbac Laboratories, Inc. 115 Corporation Way Venice, FL 34285 Ph: (941) 484-6508	SM 9215B	1003-00283	BIOPROTECT 500	<i>Pseudomonas</i>	The untreated surface with Pseudomonas showed an initial count of 1,170,000 cfu's and the BP 500 treated surface showed an initial count of 50 cfu's. At Day 90 the untreated surface showed an increase in Pseudomonas with 1,900,000 cfu's whereas the BP 500 treated surface showed a reduced count of 40 cfu's. Thus proving that BP 500 continued working in the dry state for 90 days.
5/2011	BP Testing on Ornamental Flowers	Glades Crop Care, Inc 949 Turner Quay Jupiter, FL 33458 Ph: 561-746-3740	Phytotoxicity Screening	11-02	BIOPROTECT 500	Crop tolerance	It was proven that BP does not cause a phototoxic response or crop injury when applied to foliage or open blooms.
7/22/2011	BP vs. Staph on Concrete Flooring	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1101-291	BIOPROTECT 500	<i>Staphylococcus Aureus</i> (ATCC #700699)	The BP treated concrete samples showed excellent antimicrobial activity with >99.9% reduction (>3 log kill) in Staph after 4 and 24 hours.
1/26/2012	BP vs. Staph on White Fabric	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1101-563	BIOPROTECT 500	<i>Staphylococcus Aureus</i> (ATCC #6538)	The BP treated white fabric samples showed excellent antimicrobial activity with >99.9% reduction (>3 log kill) in Staph after 4 and 24 hours.
1/30/2012	BP vs. E.Coli on Plastic Films	PolyFusion Laboratory 2201 N. Wayne St. Angola, Indiana 46703 Ph: 260-624-7659	ASTM E2149-10	13012	BIOPROTECT RTU	<i>E. Coli</i> (ATCC #25922)	The BP treated plastic films showed a 99.999% reduction (>5 log reduction) in E.Coli after 1 hour.
8/18/2012	BP vs. Aspergillus niger (Mold) on filters	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149 - 2001	1101-868	BIOPROTECT 500	<i>Aspergillus niger</i> ATCC 9642	The BP treated sample showed excellent reduction in viable mold spore count at 4 hours and at 24 hours.
11/15/2012	BP vs. C.Diff Spores	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	N/A	1101-938 and 974	BIOPROTECT RTU & BIOPROTECT 500	<i>Clostridium Difficile</i> (ATCC #9689)	BP500 showed a 99.9% reduction (3 log reduction) in C.Diff spores after 1 minute and 3 minutes. Thus, BP is effective at killing C.Diff spores.
5/11/2013	BP vs. Staph on Plastic Cases	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1101-1535	BIOPROTECT 500	<i>Staphylococcus Aureus</i> MRSA Strain (ATCC on the plastic cases after 4 and 24 hours.	The BP treated plastic cases showed >99.9% reduction (>3 log reduction) in Staph/MRSA strain of bacteria
12/19/2014	BP Testing on Plastic Hospital Bed Rails	GAP EnviroMicrobial Service 1020 Hargrieve Rd. London, Ontario, CA N6E1P9 Ph: 519-681-0571 info@gaplab.com	ISO 22196	A11149	BIOPROTECT 500	<i>Staphylococcus Aureus</i> MRSA (ATCC #3357) <i>E. Coli</i> (ATCC #25922) <i>Enterococcus faecalis</i> (ATCC #700802)	The BP treated plastic bed rails showed a >99.99933% reduction in <i>S. Aureus</i> (>5 log reduction), >99.99954% reduction in <i>E. Coli</i> (>5 log reduction) and >99.99519% reduction in <i>E. Faecalis</i> (>4 log reduction).
8/13/2015	BP vs. Staph on Lab Coats & Scrubs	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1101-3028	BIOPROTECT 500	<i>Staphylococcus Aureus</i> MRSA (ATCC #3357 after 24 hours.	The unwashed, BP treated lab coat and scrubs showed excellent resistance to <i>S. Aureus</i> with a >99.999% reduction in bacteria (>5 log reduction)
9/2/2015	BP Cytotoxic Testing	Nelson Laboratories 6280 S. Redwood Rd. Salt Lake City, UT 84123 Ph: 801-290-7500	STP0032 Rev 09 MEM Elution Test	842047	BIOPROTECT 500	Mammal cells	BIOPROTECT passed the cytotoxicity test proving it causes no harm to mammal cells.
9/5/2015	BP vs. Staph on Rigid Plastics & Metals	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1101-3048	BIOPROTECT 500	<i>Staphylococcus Aureus</i> MRSA (ATCC #3357)	The BP cured Polyethylene, Polyvinyl Chloride and Metal samples each showed >99.0-99.9% reduction (>2-3 log reduction) in <i>S. Aureus</i> after 24 hours.
2/27/2016	BP vs. Cat Urine on Towels	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1602-867	BIOPROTECT 500	Bacteria derived from Cat Urine	The unwashed, BP treated towels showed a 99.99% log reduction (4 log reduction) in bacteria after 4 and 24 hours.
3/17/2017	BP Testing on Plastic Cosmetic Cases	Spectro Analytical Labs E-41, Okhla Indl. Area, Ph-II New Delhi, India 110020 Ph: 91-11-40522000 care@spectro.in	ASTM E2149-10	16112407-1	BIOPROTECT 500	<i>E. Coli</i> (MTCC 41) <i>Staphylococcus Aureus</i> (MTCC 96) <i>Salmonella</i> (MTCC 1251) <i>Clostridium Perfringens</i> (MTCC 450) <i>Aspergillus Niger</i> (MTCC-282) <i>Candida Albicans</i> (MTCC-183) <i>Saccharomyces Cerevisiae</i> (MTCC-2569)	The BP treated plastic cosmetic compact samples showed the following results after 90 days: 99.97% (3 log) reduction in <i>E. Coli</i> 99.98% (3 log) reduction in <i>S. Aureus</i> 99.99% (4 log) reduction in <i>Salmonella</i> 99.96% (4 log) reduction in <i>C. Perfringens</i> 99.99% (4 log) reduction in <i>Aspergillus Niger</i> 99.99% (4 log) reduction in <i>Candida Albicans</i> 99.99% (4 log) reduction in <i>S. Cerevisiae</i>
10/23/2017	BP vs. Staph on Turf Material	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149	11101-288	BIOPROTECT 500	<i>Staphylococcus Aureus</i> (ATCC #700699)	Both the washed and unwashed BP treated turf samples showed >99.9% reduction (>3 log kill) against <i>S. Aureus</i> after 4 and 24 hours.
1/8/2018	BP vs. Staph on Hospital Separation Curtains	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1801095	BIOPROTECT 500	<i>Staphylococcus Aureus</i> MRSA strain (ATCC #6538)	The unwashed BP treated separation curtains showed >99.999% (5 log) reduction in <i>S. Aureus</i> after 24 hours.



**BIOPROTECT Antimicrobial
Testing Data 2020**

DATE	NAME	LABORATORY	TEST METHOD	REPORT #	PRODUCT TESTED	ORGANISM TESTED	RESULTS
1/20/2018	BP vs. C.Diff on Hospital Separation Curtains	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1801639	BIOPROTECT 500	<i>Vegetative Clostridium Difficile</i> (ATTC #BAA-1870)	The unwashed, BP treated separation curtains produced >99.98% (>3 log) reduction in <i>C.Diff</i> after 24 hours.
3/19/2018	BP vs. Salmonella on Tile Flooring	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1803-464	BIOPROTECT RTU (.05%)	<i>Salmonella</i> (ATTC #14028) Fungus type: a. <i>Aspergillus flavus</i> b. <i>Aspergillus versicolor</i> c. <i>Penicillium funiculosum</i> d. <i>Chaetomium globosum</i> e. <i>Aspergillus niger</i>	The unwashed, BP treated floor tiles showed >99.999% (>5 log) reduction in <i>Salmonella</i> after 24 hours.
4/30/2018	Antifungal Testing on BP treated Metal	E Labs 5150 Lad Land Dr. Fredericksburg, VA 22407 Phone: (540) 834-0372	MIL-STD-8106 Method 508.6	6628	BIOPROTECT 500 (5%)		The BP treated metal showed no fungal or mold growth during the 30 day test
8/24/2018	BP vs. S.Aureus on Paris Linens Bed sheets, towels & microfiber sheet	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1808955	BIOPROTECT 500 (5%) & L-420 Laundry Treatment	<i>Staphylococcus Aureus</i> (ATCC #6538)	Three out of three treated materials registered a 4 log reduction or higher post 24 hours against Staph on BP and L420 treated textiles.
8/24/2018	BP vs. E.Coli on Paris Linens Bed sheets, towels & microfiber sheet	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149-2001	1808809	BIOPROTECT 500 (5%) & L-420 Laundry Treatment	<i>E. Coli</i> (ATCC #25922)	Four out of five treated materials registered a 3 log reduction post 24 hours against E.Coli on BP and L420 treated textiles.
9/13/2018	BP vs. S.Aureus on Umf Microfiber cloth	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149 - 2013	1809363	L420 Exhaust treated (4%) BIOPROTECT 500 Exhaust treated (1%) Washed 24 hours	<i>Staphylococcus Aureus</i> (ATCC #6538)	The BIOPROTECT 500 Exhaust treated (1%) microfiber cloth washed 24 hours had a Kill rate of 99.99% which is "Excellent" Antimicrobial Activity of 4.00 in the 4 hour shaker test against <i>Staphylococcus aureus</i> . The L420 Exhaust treated (4%) microfiber cloth had a Kill rate of 98.53% in the 4 hour shaker test against <i>Staphylococcus aureus</i> .
9/13/2018	BP vs. E.Coli on Umf Microfiber Cloth	Sanders Laboratories 1050 Endeavor Court Nokomis, FL 34275 Ph: 941-488-8103	ASTM E2149 - 2013	1809364	L420 Exhaust treated (4%) BIOPROTECT 500 Exhaust treated (1%) Washed 24 hours	<i>Escherichia Coli</i> (ATCC #25922)	The BIOPROTECT 500 Exhaust treated (1%) microfiber cloth washed 24 hours had a Kill rate of 99.89% which is "Good" Antimicrobial Activity of 2.95 in the 4 hour shaker test against <i>Escherichia coli</i> .
11/8/2018	BP Testing on CS Medical Curtains	Sporometrics Inc 219 Dufferin St #20c Toronto, ON M6K 1Y9 Canada Ph: 416-516-1660	ASTM E2149	31212	-Architex Rx8001 (100% Trevira) + BIOPROTECT 500 -Maharam 511459 004 Breeze (100% Polyester) + BIOPROTECT 500 -CS Isolation Curtain, Royal Blue (100% Polypropylene) + BIOPROTECT 500	<i>Staphylococcus aureus</i> <i>Enterococcus</i> <i>Pseudomonas aeruginosa</i>	Treatment of the three fabrics with BIOPROTECT 500 was effective in reducing the bacterial concentrations of three medically relevant pathogenic microorganisms when compared to untreated organisms. The antimicrobial activity was consistent 1, 3 and 6 weeks after application.