TEST RESULTS ACCORDING ISO 22196 ON BALLPOINT PENS WITH ZINC IONS' ADDITIVE

List of tested bacteria

- *Escherichia coli ATCC 25922*
- *Staphylococcus aureus ATCC 6538P*
- *Meticillin-resistant Staphylococcus aureus (MRSA) ATCC 33591*
- *Acinetobacter Baumannii ATCC 19606*
- *Streptococco pyogene*
- *Klebsiella pneumoniae*
- *Proteus vulgaris*
- *Salmonella*
- *Pseudomonas aeruginosa ATCC 10145*
- *Enterobacter cloacae NCTC 10005*
- *Clostridium difficile ATCC 9689*
- *Candida albicans ATCC 10231*

Results

MICROBIC FAMILIES	Initial Inoculum	Inoculum control	ABS PEN	Log reduction	Reduction %
Escheriachia coli	3,0 x 10^6	3,5 x 10^7	3,95 x 10^5	**1,95**	**99,8**
Staphylococcus aureus	5,2 x 10^6	2,83 x 10^7	1,71 x 10^5	**2,22**	**99,7**
MRSA	2,4 x 10^5	2,16 x 10^7	3,95x10^4	**2,73**	**97,2**
Acinetobacter baum.	2,5x 10^6	4,00 x10^7	3,15 x 10^6	**1,10**	**98,1**
Ps. aeruginosa	1,5 x 10^6	1,59 x 10^7	1,75 x 10^4	**2,95**	**99,2**
Ent. cloacae	4,72 x 10^6	2,08 x 10^7	1,75 x 10^5	**2,07**	**99,5**
C. albicans	1 x 10^7	1,53 x 10^7	8,70 x 10^5	**1,24**	**98,5**
Clostriudim diff.	1 x 10^6	1,2 x 10^6	1,4 x10^4	**1,93**	**98,1**
Streptococco pyogene	2,5x 10^6	4,01 x10^7	3,15 x 10^6	**1,10**	**98,1**
Klebsiella pn.	1 x 10^7	1,53 x 10^7	8,70 x 10^5	**1,24**	**98,8**
Proteus Vulgaris	3,0 x 10^6	3,5 x 10^7	3,94 x 10^5	**1,95**	**98,9**
Salmonella	4,71 x 10^6	2,08 x 10^7	1,75 x 10^5	**2,07**	**99,2**