EBIOX TRIONIC EFFICACY TESTS

Product	Test	Organism	Pass Criteria		Test Result	
			Contact Time	Pass Level	Contact Time	Level Achieved
Trionic*	EN1040 Bactericidal Efficacy Test	Pseudomonas aeruginosa Staphylococcus aureus	Specified by sponsor	>5 log reduction	5 minutes	>6 log reduction
	EN1276 Bactericidal Efficacy Test	Pseudomonas aeruginosa Staphylococcus aureus Escherichia coli Enterococcus hirae M.R.S.A. G.R.S.A. Salmonella choleraesuis Listeria monocytogenes Acinetobacter spp Bacillus subtilis Enterococcus faecalis Proteus mirabilis Streptococcus Pyogenes Klebsiella pneumoniae	Specified by sponsor	>5 log reduction	1 minute	>6 log reduction >5 log reduction
	EN1276 Bactericidal Efficacy Test (1%)	Mycobacterium terrae	Specified by sponsor	>5 log reduction	5 minutes	>5 log reduction
	EN1276 Bactericidal Efficacy Test at 10 degrees C (for food industry)	Staphylococcus aureus Escherichia coli Enterococcus hirae Salmonella choleraesuis Listeria monocytogenes	Specified by sponsor	>5 log reduction	1 minute 1 minute 1 minute 1 minute 1 minute	>6 log reduction
	EN1656 Bactericidal Efficacy Test for Veterinary Sector	Staphylococcus aureus Proteus vulgaris Pseudomonas aeruginosa Enterococcus hirae	Specified by sponsor	>5 log reduction	5 minutes 5 minutes 5 minutes 5 minutes	>6 log reduction
	EN1275 Fungicidal Efficacy Test	Candida albicans Aspergillus niger Tricophyton mentagrophytes	Specified by sponsor	>4 log reduction	5 minutes 5 minutes 10 minutes	>5 log reduction >5 log reduction
	Standard Methods of the DGHM for testing chemical disinfectants 6% dilution	Staphylococcus aureus Enterococcus hirae Escherichia coli Pseudomonas aeruginosa Candida albicans	Tested at 1, 2, 5, 15, 30 and 60 minutes Tested at 1, 2, 5, 15,30 and 60 minutes	>5 log reduction >4 log reduction	5 minutes 5 minutes 5 minutes 5 minutes 5 minutes	>5 log reduction >4 log reduction
	Triangle Taint Test (Unfragranced Product)	-	-	Maximum 11 Positive Identifiers	-	6 Positive Identifiers
	Gravimetric Evaluation of Anti-Biofilm Test Agents	Pseudomonas aeruginosa	Specified by sponsor	3 log reduction	5 minutes	5.5 log reduction
	EPA Virucidal Efficacy Test	Avian Influenza Virus Human Corona Virus H.I.V. Herpes simplex Hepatitis B Adenovirus 5	Specified by sponsor	Complete inactivation of the test virus	5 minutes 5 minutes 5 minutes 5 minutes 5 minutes 10 minutes	Complete inactivation of the test virus
	AOAC Use Dilution Healthcare Test	Pseudomonas aeruginosa Staphylococcus aureus Salmonella choleraesuis	Specified by sponsor	Visible growth not observed in 59/60 subculture broths	5 minutes 5 minutes 5 minutes	Visible growth not observed in 59/60 subculture broths
	AOAC Use Dilution Healthcare Test Supplemental	MRSA/G.R.S.A.	Specified by sponsor	Visible growth not observed in 10/10 subculture broths	5 minutes	Visible growth not observed in 10/10 subculture broths
	AOAC Fungicidal Effectiveness Test	Tricophyton mentagrophytes	Specified by sponsor	Zero growth in all test tubes	5 minutes	Zero growth in all test tubes
	EN 1275, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of basic fungucidal or basic yeasticidal activity of chemical disinfectants and aniticeptics - Test method and requirements (phase 1) (Trionic Wipes Solution)	Candida albicans Aspergillus niger	15 minutes	> 4 log reduction	15 minutes	Passes the requirement of EN1275 for fungicidal activity in 15 minutes at 20°C
	EN 1650, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungucidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes Solution)	Candida albicans Aspergillus niger	15 mInutes 5 minutes	> 4 log reduction	15 minutes 5 minutes	Passes the requirements of EN1650 for fungicidal activity at 15 & 5 minutes
	EN 1650, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungucidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1)(Trionic D Lot 02477 DOM 12/2007 EXP 12/2010)	Candida albicans	15 minutes 5minute 1 minute	> 4 log reduction	15 minutes 5 minutes 1 minute	Passes the requirement of EN 1650 for yeasticidal activity in 15, 5 & 1 minute at 20° C under clean conditions & 15 & 5 minutes in dirty conditions
	EN 13704, Chemical disinfectants - Quantative suspension test for the evaluation of sporadical activity of chemical disinfectants used in human medicine, veterinary field, and food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)	Clostridium difficile	3 minutes 1 minute	> 3 log reduction	3 minutes 1 minute	Passes the requirement of EN 13704 for bactericidal activity in1 & 3 minutes at 20° C under dirty conditions
Trionic Spray*	EN1040 Bactericidal Efficacy Test	Pseudomonas aeruginosa Staphylococcus aureus	Specified by sponsor	>5 log reduction	5 minutes	>6 log reduction
	EN1276 Bactericidal Efficacy Test	Pseudomonas aeruginosa Staphylococcus aureus Escherichia coli Enterococcus hirae M.R.S.A. G.R.S.A. Salmonella choleraesuis Listeria monocytogenes Acinetobacter spp Bacillus subtilis Enterococcus faecalis Proteus mirabilis Streptococcus Pyogenes Klebsiella pneumoniae	Specified by sponsor	>5 log reduction	1 minute	>6 log reduction >5 log reduction
	EN1276 Bactericidal Efficacy Test at 10 degrees C (for food industry)	Staphylococcus aureus Escherichia coli Enterococcus hirae Salmonella choleraesuis Listeria monocytogenes	Specified by sponsor	>5 log reduction	1 minute 1 minute 1 minute 1 minute 1 minute	>6 log reduction
	EN1276 Bactericidal Efficacy Test (1%)	Mycobacterium terrae	Specified by sponsor	>5 log reduction	5 minutes	>5 log reduction
	EN1656 Bactericidal Efficacy Test for Veterinary Sector	Staphylococcus aureus Proteus vulgaris Pseudomonas aeruginosa Enterococcus hirae	Specified by sponsor	>5 log reduction	5 minutes 5 minutes 5 minutes 5 minutes	>6 log reduction
	EN1275 Fungicidal Efficacy Test	Candida albicans Aspergillus niger Tricophyton mentagrophytes	Specified by sponsor	>4 log reduction	5 minutes 5 minutes 10 minutes	>5 log reduction >5 log reduction
	Standard Methods of the DGHM for testing chemical disinfectants 6% dilution	Staphylococcus aureus Enterococcus hirae Escherichia coli Pseudomonas aeruginosa Candida albicans	Tested at 1, 2, 5, 15, 30 and 60 minutes Tested at 1,2,5,15, 30 and 60 minutes	>5 log reduction >4 Log reduction	5 minutes 5 minutes 5 minutes 5 minutes 5 minutes	>5 log reduction >4 Log reduction
	Triangle Taint Test (Unfragranced Product)	-	-	Maximum 11 Positive identifiers	-	6 Positive Identifiers
	Gravimetric Evaluation of Anti-Biofilm Test Agents	Pseudomonas aeruginosa	Specified by sponsor	3 log reduction	5 minutes	5.5 log reduction
	EPA Virucidal Efficacy Test	Avian Influenza Virus Human Corona Virus H.I.V. Herpes simplex Hepatitis B Adenovirus 5	Specified by sponsor	Complete inactivation of the test virus	5 minutes 5 minutes 5 minutes 5 minutes 5 minutes 10 minutes	Complete inactivation of the test virus
	AOAC Germicidal Spray Test	Pseudomonas aeruginosa Staphylococcus aureus Salmonella choleraesuis	Specified by sponsor	Visible growth not observed in 59/60 subculture broths	1 minute 1 minute 1 minute	Visible growth not observed in 59/60 subculture broths
	EN 13727, Chemical disinfectants and antiseptecs - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants for instruments used in the medical area - Test method and requirements (phase 2, step 1)	Pseudomonas aeruginosa Staphylococcus aureus Enterococcus hirae	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 13727 for bactericidal activity in 1 minute at 20° C under dirty conditions
	EN 13624, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungicidal and yeasticidal activity of chemical disinfectants for instruments used in the medical area - Test method and requirements (phase 2, step 1)	Aspergillus niger Candida albicans	1 minute 5 minutes	> 4 log reduction	1 minute 5 minutes	Passes the requirement of EN 13624 for fungicidal/yeasticidal activity in 1 & 5 minutes at 20° C under dirty conditions
	EN 14348, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of mycobactericidal (or tuberculocidal) activity of chemical disinfectants and aniticeptics used in the medical area - Test method and requirements (phase 2, step 1)	Mycobacterium terrae	5 minutes	> 4 log reduction	5 minutes	Passes the requirement of EN 14348 for tuberculocidal activity in 5 minutes at 20° C under dirty conditions

	Bactericidal Efficacy of Trionic Wipes	E. Coli Staphylococcus aureus Bacillus subtilis Enterococcus hirae Candida albicans MRSA Pseudomonas aeruginosa Streptococcus Pyogenes Proteus mirabilis	Specified by sponsor	No pass criteria is specified for this test protocol	1 minute	<10 CFU remaining
	EN1276 Bactericidal Efficacy Test	MRSA GRSA Staphylococcus aureus Pseudomonas aeruginosa Escherichia coli Enterococcus hirae Proteus mirabilis Streptococcus Pyogenes Listeria monocytogenes Salmonella choleraesuis Klebsiella pneumoniae	Specified by sponsor	>5 log reduction	1 minute	>6.4 log reduction >6.5 log reduction >7 log reduction >5.9 log reduction >6 log reduction >6.3 log reduction 5.2 log reduction >7 log reduction >6.6 log reduction >6.5 log reduction >7.5 log reduction
	EN1276 Bactericidal Efficacy Test	Mycobacterium terrae	Specified by sponsor	>5 log reduction	5 minutes	>5 log reduction
	EN1650 Fungicidal Efficacy Test	Candida albicans	Specified by sponsor	>4 log reduction	1 minute	>5.9 log reduction
	EN1656 Bactericidal Efficacy Test for Veterinary Sector	Streptococcus Agalactiae Salmonella typhimurium Enterococcus faecalis	Specified by sponsor	>5 log reduction	1 minute	>6.6 log reduction >7.1 log reduction >6.8 log reduction
	Testing Pre-saturated or impregnaged towelettes for hard surface disinfection	Pseudomonas aeruginosa Staphylococcus aureus Salmonella choleraesuis	Specified by sponsor	Visible growth not observed in 59/60 carriers/lot	5 minutes	Visible growth not observed in 59/60 carriers/lot
	Impregnated Towelette Test Bactericidal Effectiveness	G.R.S.A.	Specified by sponsor	Visible growth not observed in 10/10 subculture broths	1 minute	Visible growth not observed in 10/10 subculture broths
	Impregnated Towelette Test Virucidal Effectiveness	Herpes simplex type 1 H.I.V. Adenovirus 5	Specified by sponsor	Complete inactivation of the test virus	5 minutes 5 minutes 10 minutes	Complete inactivation of the test virus
	Israeli standard No. 1944 Feb. 1997 (Surfaces)	Escherichia coli Staphylococcus aureus Pseudomonas aeruginosa Candida albicans	Specified by sponsor	Complete elimination of artificial contamination from surfaces	1 minute	Complete elimination of artificial contamination from surfaces
	Israeli standard No. 1944 Feb. 1997 (Skin)	Escherichia coli Staphylococcus aureus Pseudomonas aeruginosa Candida albicans	Specified by sponsor	Complete elimination of artificial contamination from hands	30 seconds	Complete elimination of artificial contamination from hands
	US Pharmacopoeia 28 2005 Antimicrobial Effectiveness Test to determine the preservative efficacy	Pseudomonas aeruginosa Staphylococcus aureus Escherichia coli Candida albicans Aspergillus niger	Monitored at 1 day, 1 week, 2 week, 3 week and 4 week intervals	Following initial log reduction, no increase in survivors between weeks 2-4	Monitored at 1 day, 1 week, 2 week, 3 week and 4 week intervals	Following initial log reduction, <10 CFU/gr maintained in weeks 2-4.
	EN 1275, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of basic fungicidal or basic yeasticidal activity of chemical disinfectants and aniticeptics - Test method and requirements (phase 1) (Trionic Wipes Solution)	Candida albicans Aspergillus niger	15 minutes	> 4 log reduction	15 minutes	Passes the requirement of EN1275 for fungicidal activity in 15 minutes at 20°C
	EN 1650, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungucidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes Solution)	Candida albicans Aspergillus niger	15 mInutes 5 minutes	> 4 log reduction	15 minutes 5 minutes	Passes the requirements of EN1650 for fungicidal activity at 15 minutes for CA/AN. CA passes in 5 minutes but AN fails.
Trionic Wipes	EN 1650, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungucidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic D Wipes Lot 130112 DOM 12/2007 EXP 12/2010)	Candida albicans	15 minutes 5minute	> 4 log reduction	15 minutes 5 minutes	Passes the requirement of EN 1650 for yeasticidal activity in 15 & 5 minutes at 20° C under clean/ dirty conditions
	Modified EN 14476 Human Influenza A Virus (H1N1) (Trionic Wipe Impregnant)	Influenza A (H1N1) (TC Adapted)	3 Minutes	> 3 log reduction	3 Minutes	Passes the requirement of modified EN 14476 for virucidal efficacy in 3 minutes at 20°C under clean conditions
	Modified EN 14476 Human Influenza A Virus (H1N1) (Trionic Wipe Expressed Liquor)	Influenza A (H1N1) (TC Adapted)	3 Minutes	> 3 log reduction	3 Minutes	Passes the requirement of modified EN 14476 for virucidal efficacy in 3 minutes at 20°C under clean conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Solo Wipes DOM November 08)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes LOT 130170 DOM 10/2009 EXP 10/2011)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes LOT 10310 DOM 05/2010 EXP 04/2013)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes LOT 19610 DOM 07/2010 EXP 07/2013)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Wipes LOT 29910 DOM 10/2010 EXP 10/2013)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Flat Pack Wipes DOM 09/2009 EXP 09/2011)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 1276, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants and aniticeptics used in food, industrial, domestic & institutional areas - Test method and requirements (phase 2, step 1) (Trionic Fluid prior to wiper edition DOM 03/2010 EXP 03/2013)	Pseudomonas aeruginosa Staphylococcus aureus	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 1276 for bactericidal activity in 1 minutes at 20° C under dirty conditions
	EN 13727, Chemical disinfectants and antiseptecs - Quantative suspension test for the evaluation of bactericidal activity of chemical disinfectants for instruments used in the medical area - Test method and requirements (phase 2, step 1)	Pseudomonas aeruginosa Staphylococcus aureus Enterococcus hirae	1 minute	> 5 log reduction	1 minute	Passes the requirement of EN 13727 for bactericidal activity in 1 minute at 20° C under dirty conditions
	EN 13624, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of fungicidal and yeasticidal activity of chemical disinfectants for instruments used in the medical area - Test method and requirements (phase 2, step 1)	Aspergillus niger Candida albicans	1 minute 5 minutes	> 4 log reduction	1 minute 5 minutes	Passes the requirement of EN 13624 for fungicidal/yeasticidal activity in 1 & 5 minutes at 20° C under dirty conditions
	EN 14348, Chemical disinfectants and antiseptics - Quantative suspension test for the evaluation of mycobactericidal (or tuberculocidal) activity of chemical disinfectants and aniticeptics used in the medical area - Test method and requirements (phase 2, step 1)	Mycobacterium terrae	5 minutes	> 4 log reduction	5 minutes	Passes the requirement of EN 14348 for tuberculocidal activity in 5 minutes at 20° C under dirty conditions
	EN 13704, Chemical disinfectants - Quantative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in human medicine, veterinary field, and food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)	Clostridium difficile	1 minutes 3 minutes	> 3 log reduction	1 minute 3 minutes	Passes the requirement of EN 13704 for bactercidal activity in 1 & 3 minutes at 20° C under dirty conditions