



122 FAIRFIELD RD., FAIRFIELD, NJ 07004-2405 • PHONE: [973] 227-6882 • FAX: [973] 227-0812
e-mail: info@gibraltarlabsinc.com • internet: www.gibraltarlabsinc.com

REPORT No. G-149705

Project No.: GR2048

4/21/2005 Page 1 of 15

EDUCATION Ph.D. Supervised
EXPERIENCE Serving since 1970
EXTRAORDINARY Upstream QA™
Speed Reports
Golden Thread™

LABORATORY REPORT

EXCELLENCE = GIBRALTAR

Study Title

EPA Food Contact Sanitizer Test For Previously Cleaned Food-Contact Surfaces (AOAC Germicidal and Detergent Sanitizing Action of Disinfectant) against *Salmonella choleraesuis* and *Listeria monocytogenes*

Product Identity

Perasan A

Data Requirement

EPA Pesticide Assessment Guidelines Subdivision G, 1982, 91-2

Author

Daniel L. Prince, Ph.D.
President

Study Completion Date

4/21/2005

Testing Facility

Gibraltar Laboratories, Inc.
122 Fairfield Road
Fairfield, NJ 07004

Laboratory Project Number (Study File)

GBL Study # GR 2048

For use of client only. This report shall not be reproduced except in full, without the written approval of the laboratory. Neither the name of this laboratory nor any member of its staff are to be used for sales or advertising without written authorization. Results pertain to samples tested only and are not necessarily indicative of the qualities of apparently identical or similar samples or products from the same or different lots, batches, or sources.



122 FAIRFIELD RD., FAIRFIELD, NJ 07004-2405 • PHONE: [973] 227-6882 • FAX: [973] 227-0812
 e-mail: info@gibraltarlabsinc.com • internet: www.gibraltarlabsinc.com

REPORT No. G-149705
Project No.: GR2048
 4/21/2005 Page 12 of 15

EDUCATION Ph.D. Supervised
EXPERIENCE Serving since 1970
EXTRAORDINARY Upstream DNA™
 Speed Reports
 Golden Thread™

LABORATORY REPORT

EXCELLENCE = GIBRALTAR

Table 1: Raw Data Results for *Salmonella choleraesuis*

Test Substance	Concentration in ppm (v/v)	Exposure Time	Flask	Plate Counts (CFU/plate)			
				Number Surviving membrane filtration		Number Controls (10 ⁻⁶) (Microbes Initially Present) Sum of membrane filtration 90 mL + 10 mL	
				90 mL	10 mL	Flask A	Flask B
Perasan A Lot # 35-411021	72.9	30 seconds	Flask A	0	0	86	79
			Flask B	0	0		
		60 seconds	Flask A	0	0		
			Flask B	0	0		
Perasan A Lot # 35-410152	72.9	30 seconds	Flask A	0	0	86	79
			Flask B	0	0		
		60 seconds	Flask A	0	0		
			Flask B	0	0		
						Avg. of Flask A and B 8.3 x 10 ⁷ = 7.92 Log	

For use of client only. This report shall not be reproduced except in full, without the written approval of the laboratory. Neither the name of this laboratory nor any member of its staff are to be used for sales or advertising without written authorization. Results pertain to samples tested only and are not necessarily indicative of the qualities of apparently identical or similar samples or products from the same or different lots, batches, or sources.



122 FAIRFIELD RD., FAIRFIELD, NJ 07004-2405 • PHONE: [973] 227-8882 • FAX: [973] 227-0812
 e-mail: info@gibraltarlabsinc.com • internet: www.gibraltarlabsinc.com

REPORT No. G-149705
 Project No.: GR2048
 4/21/2005 Page 13 of 15

EDUCATION Ph.D. Supervised
EXPERIENCE Serving since 1970
EXTRAORDINARY Upstream DA™
 Speed Reports
 Golden Thread™

LABORATORY REPORT

EXCELLENCE = GIBALTAR

Table 2: Calculated Results for *Salmonella choleraesuis* (cfu/mL) by Lot, Exposure, and Corresponding Percent and Log₁₀ Reduction

Test Substance	Exposure Time	Concentration in ppm (v/v)	Average Number Surviving (cfu/mL)	Microbes Initially Present (cfu/mL)	Microbes Initially Present (Log ₁₀)	Log ₁₀ Reduction	Percent Reduction
Perasan A Lot # 35-411021	30 seconds	72.9	0	8.3 x 10 ⁷	7.92	7.92	>99.999%
Perasan A Lot # 35-410152	30 seconds	72.9	0	8.3 x 10 ⁷	7.92	7.92	>99.999%

For use of client only. This report shall not be reproduced except in full, without the written approval of the laboratory. Neither the name of this laboratory nor any member of its staff are to be used for sales or advertising without written authorization. Results pertain to samples tested only and are not necessarily indicative of the qualities of apparently identical or similar samples or products from the same or different lots, batches, or sources.



122 FAIRFIELD RD., FAIRFIELD, NJ 07004-2405 • PHONE: [973] 227-6882 • FAX: [973] 227-0812
 e-mail: info@gibraltarlabsinc.com • internet: www.gibraltarlabsinc.com

REPORT No. G-149705

Project No.: GR2048
 4/21/2005 Page 14 of 15

EDUCATION Ph.D. Supervised
 EXPERIENCE Serving since 1970
 EXTRAORDINARY Upstream QA™
 Speed Reports
 Golden Thread™

LABORATORY REPORT

EXCELLENCE = GIBRALTAR

Table 3: Raw Data Results for *Listeria monocytogenes*

Test Substance	Concentration in ppm (v/v)	Exposure Time	Flask	Plate Counts (CFU/plate)			
				Number Surviving membrane filtration		Number Controls (10 ⁻⁶) (Microbes Initially Present) Sum of membrane filtration 90 mL + 10 mL	
				90 mL	10 mL	Flask A	Flask B
Perasan A Lot # 35-411021	72.9	30 seconds	Flask A	0	0	78	80
			Flask B	0	0		
		60 seconds	Flask A	0	0		
			Flask B	0	0		
Perasan A Lot # 35-410152	72.9	30 seconds	Flask A	0	0		
			Flask B	0	0		
		60 seconds	Flask A	0	0		
			Flask B	0	0		
						Avg. of Flask A and B 7.9 x 10 ⁷ = 7.9 Log	

For use of client only. This report shall not be reproduced except in full, without the written approval of the laboratory. Neither the name of this laboratory nor any member of its staff are to be used for sales or advertising without written authorization. Results pertain to samples tested only and are not necessarily indicative of the qualities of apparently identical or similar samples or products from the same or different lots, batches, or sources.



122 FAIRFIELD RD., FAIRFIELD, NJ 07004-2405 • PHONE: [973] 227-6882 • FAX: [973] 227-0812
 e-mail: info@gibraltarlabsinc.com • internet: www.gibraltarlabsinc.com

REPORT No. G-149705
Project No.: GR2048
 4/21/2005 Page 15 of 15

EDUCATION Ph.D. Supervised
EXPERIENCE Serving since 1970
EXTRAORDINARY Upstream DA™
 Speed Reports
 Golden Thread™

LABORATORY REPORT

EXCELLENCE = GIBRALTAR

Table 4: Calculated Results for *Listeria monocytogenes* (cfu/mL) by Lot, Exposure, and Corresponding Percent and Log₁₀ Reduction

Test Substance	Exposure Time	Concentration in ppm (v/v)	Average Number Surviving (cfu/mL)	Microbes Initially Present (cfu/mL)	Microbes Initially Present (Log ₁₀)	Log ₁₀ Reduction	Percent Reduction
Perasan A Lot # 35-411021	30 seconds	72.9	0	7.9 x 10 ⁷	7.9	7.9	>99.999%
Perasan A Lot # 35-410152	30 seconds	72.9	0	7.9 x 10 ⁷	7.9	7.9	>99.999%

Table 5: Neutralization Effectiveness and Neutralization System Toxicity Control Results

Test Substance and Test	<i>Salmonella choleraesuis</i>			<i>Listeria monocytogenes</i>		
	Flask A (cfu)	Flask B (cfu)	Inoculum (cfu)	Flask A (cfu)	Flask B (cfu)	Inoculum (cfu)
Neutralization Effectiveness Control Perasan A Lot # 35-411021	24	22	24	18	17	20
Neutralization System Toxicity Control	21	22		19	16	

Table 6: Sterility Control Results

Reagents and Lot #'s	
AOAC Hard Water Lot # C-1334, 1342	Sterile, Sterile
Phosphate Buffer Dilution Water Lot # C-403, D-122, D-123	Sterile, Sterile, Sterile
Neutralizer Broth (Phosphate Buffer Dilution Water containing 23.8 units catalase / mL and 0.055 Sodium thiosulfate) Lot # C-403, D-122, D123	Sterile, Sterile, Sterile

For use of client only. This report shall not be reproduced except in full, without the written approval of the laboratory. Neither the name of this laboratory nor any member of its staff are to be used for sales or advertising without written authorization. Results pertain to samples tested only and are not necessarily indicative of the qualities of apparently identical or similar samples or products from the same or different lots, batches, or sources.