CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 10/20/2016

Experimenters: Carla De La Cruz

ClientType: Cleaning Equipment Mfr

ProjectNumber: Project #2

Substrates: Liquid

PartType: Coupon

Contaminants: Odor

Cleaning Methods: Immersion/Soak

Analytical Methods: Smell

Purpose: To determine whether the Force of Nature product is better at eliminating the odor of milk than a 1% bleach solution.

Experimental Procedure: Milk was placed in several glass jars and allowed to age for 3 days. The cleaning solutions were prepared the day of use, bleach was diluted to 1% and the Force of Nature cleaner was made following the instructions provided. Although the cleaner was made three times, each time the free chlorine content was always about 750 ppm, and the pH was of 4.5. Testing began with three experimenters smelling a control bottle and comparing it to all other bottles. The rating system was 1-5, 5 being the worst smelling and 1 being the best smelling. Two sprays of the cleaner corresponding to each bottle were applied and then they were again smelled and rated. This step was repeated two more times for a total of 6 sprays on each bottle. The bottles were then left overnight and smelled the next day and rated. An additional two sprays were applied the day after initial testing and the final ratings were obtained.

Results:

	Bottle	Tester	Initial	2 sprays	4 sprays	6 sprays	Product Ave	Overnight	Product Ave	Overnight (+2)	Product Ave
Force of Nature	A	1	5	4.5	4.1	3.6	3.5	4.8	4.2	3.2	3.3
		2	5	4.5	3.5	3		5		3.5	
		3	3	2.5	2.5	2.5		4		3.5	
	B	1	4.5	4.2	4.2	4		4.5		3.4	
		2	5	5	4	3.9		4.5		3.7	
		3	4	3	3	3		3		3.4	
	C	1	4	4.2	4	4.2		4.5		3.5	
		2	5	4	3.5	4		4		3	
		3	5	5	3.5	3		3.5		2.5	
1% bleach solution	D	1	4.5	4.5	3.9	3.7	3.6	4.7	4.4	3.1	3.2
		2	5	4.5	3.8	3		4		3	
		3	5	4.5	4	4		4		3	
	E	1	4	4.4	3.8	3.9		4.8		2.8	
		2	4	4	3.5	3.5		4		3.3	
		3	3	3	3	3		4.5		2.5	
	F	1	4.2	4.5	4.1	3.8		4.3		3.3	
		2	4	4.2	4	3.8		4		3.7	
		3	4.5	3.5	3.5	3.5		5		4	

Summary:

Substrates:	Liquid
Contaminants:	Odor

Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Healthier Cleaning Innovations	Force of Nature	100	0.00	☑	
Clorox Company	Clorox Bleach	1	0.00	☑	

Conclusion: Milk was placed in several glass jars and allowed to age for 3 days. The cleaning solutions were prepared the day of use, bleach was diluted to 1% and the Force of Nature cleaner was made following the instructions provided. Although the cleaner was made three times, each time the free chlorine content was always about 750 ppm and the pH was of 4.5. Testing began with three experimenters smelling a control bottle and comparing it to all other bottles. The rating system was 1-5, 5 being the worst smelling and 1 being the best smelling. Two sprays of the cleaner corresponding to each bottle were applied and then they were again smelled and rated. This step was repeated two more times for a total of 6 sprays on each bottle. The bottles were then left overnight and smelled the next day and rated. An additional two sprays were applied the day after initial testing and the final ratings were obtained.

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