CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2020
DateRun:	07/29/2020
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Food
PartType:	Part
Contaminants:	Dirt, Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric, Visual
Purpose:	To conduct performance testing on supplied product and compare with water and related industry product.
Experimental Procedure:	The soil mixture used a teaspoon of AATCC Carpet soil added to 50 ml of mineral oil and shaken to mix it up. The soil was using a plastic squeeze pipette. Approximately 0.03 to 0.05 grams of soil was added to a precleaned piece of fruit/vegetable. The fruit/vegetable was weighed with the dirt to determine the amount of soil added. The dirty fruit/vegetable was cleaned for 20 seconds using immersion and mild agitations (up and down dunking). Final weights were recorded and the percent soil removal was calculated. Test evaluation was run in triplicate. Water was used as a control. In addition, a panel of three were used to visually rank the fruit/vegetable from best to worst.
Results:	The supplied product was the top performer, removing over 90% of the soil. The qualitative assessment matched the quantitative removal rates.

Cleaner	Initial wt	Final wt	% Removed	Overall Average Removal
Water	0.0311	0.0106	65.92	63.67
	0.0271	0.0068	74.91	
	0.0277	0.0138	50.18	
Rebel Green	0.0543	0.0034	93.74	92.79
	0.0254	0.0038	85.04	
	0.0237	0.0001	99.58	
Annie's Pure and Simple Meyer Lemon	0.0462	0.0048	89.61	90.11
	0.0227	0.0013	94.27	
	0.0384	0.0052	86.46	
Citrus Magic Veggie Wash	0.0617	0.0158	74.39	67.77
	0.0574	0.0221	61.50	
	0.0660	0.0215	67.42	
Fit Organic	0.0419	0.0028	93.32	93.36
	0.0325	0.0028	91.38	
	0.0476	0.0022	95.38	

Visual Ranking

Cleaner	Visual Rank 1	Visual Rank 2	Visual Rank 3
Water	4	4	4
Rebel Green	1	1	1
Annie's Pure and Simple Meyer Lemon	2	2	2
Citrus Magic Veggie Wash	3	3	3
Fit Organic	1	1	1

Summary:

Substrates:	Food				
Contaminants:	Dirt, Oil				
	Product Name:	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**

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Company Name:					
Water	Water	100%	63.67	☐	Visual Rank 4
Rebel Green	Fruit and Veggie Clean	100%	92.79	☑	Visual Rank 1
Annie's Pure and Simple	Annie's Pure and Simple All Purpose Product - Meyer Lemon	100%	90.11	☑	Visual Rank 2
Beaumont Products	Veggie Wash Fruit and Vegetable Wash	100%	67.77	☐	Visual Rank 3
Fit Organic	Fit Organic Fruit and Vegetable Wash	100%	93.36	☑	Visual Rank 1

Conclusion: Fit Organic Fruit and Vegetable Wash was the most effective cleaner, but Rebel Green was as effective in visual ranking and percent removal.