CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2025
DateRun:	10/01/2025
Experimenters:	Amelia Wagner
ClientType:	Cleaning Equipment Mfr
ProjectNumber:	Project #4
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Food
Cleaning Methods:	Mechanical Agitation
Analytical Methods:	Gravimetric
Purpose:	To test the efficacy of the Force of Nature Dishwashing tabs in removing 24 hour aged spaghetti saice from stainless steel in comparison to a baseline product
Experimental Procedure:	Stainless steel was chosen as the testing substrate to represent stainless steel utensils. Sixteen stainless steel coupons were assigned to each cleaner. Each coupon had their initial weights recorded. About 1 gram of chunky tomato basil sauce was applied and spread out on the full surface of each coupon. The coupons were then baked in the convection oven at 250 F for 60 minutes. The coupons were then removed and left to age for 24 hours. After the 24-hour ageing period each coupon was weighed to determine the amount of soil on each coupon. Each set of 16 coupons were then washed in the dishwasher for a 76-minute cycle using the assigned cleaning product. Each cleaning cycle in the dishwasher utilized water with a hardness of 63ppm reaching a maximum temperature of 110F. After the washing cycle, the coupons were removed and allowed to air dry for 2 hours (until the residual water droplets on the coupons had evaporated). Once dried, each coupon had their final weight recorded to determine how much of the soil had been removed during the cleaning cycle.

Results:

Cleaner	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG
Cascade Complete Diswashing Detergent Pod	1.3735	0.0010	99.93	99.73
	1.4161	0.0161	98.86	
	0.3956	0.0012	99.70	
	1.5992	0.0000	100.00	
	1.4147	0.0055	99.61	
	1.2676	0.0021	99.83	
	1.1604	0.0044	99.62	
	1.4325	0.0005	99.97	
	1.5368	0.0026	99.83	
	1.7053	0.0021	99.88	
	1.4933	0.0001	99.99	
	1.3563	0.0015	99.89	
	1.4801	0.0012	99.92	
	1.3921	0.0017	99.88	
	1.1267	0.0128	98.86	
	1.5576	0.0015	99.90	
Force of Nature ADW Tablet	1.3905	0.0010	99.93	99.94
	1.5153	0.0000	100.00	
	1.1743	0.0002	99.98	
	1.8647	0.0000	100.00	
	1.7993	0.0002	99.99	
	1.2149	0.0003	99.98	
	1.7057	0.0000	100.00	
	3.0076	0.0001	100.00	
	2.1751	0.0020	99.91	
	1.4096	0.0062	99.56	
	1.4390	0.0000	100.00	
	1.0041	0.0002	99.98	
	1.4082	0.0007	99.95	

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1.0687	0.0019	99.82
1.4058	0.0001	99.99
2.0079	0.0009	99.96

Summary:

Substrates:	Stainless Steel				
Contaminants:	Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Procter & Gamble	Cascade Complete (Dawn)		99.73	☑	
Healthier Cleaning Innovations	Force of Nature Dish Washing Tab		99.94	☑	

Conclusion: The Force of Nature Dishwashing Tablets were highly effective in removing the soil from stainless steel. It was able to outperform the Cascade Complete Dishwashing Detergent Pods by a small margin.