CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2025
DateRun:	09/16/2025
Experimenters:	Tatyanna Moreland Junior, Rachael Rososky
ClientType:	Community Group
ProjectNumber:	Project #2
Substrates:	Ceramics, Plastic, Stainless Steel
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To test the efficiency of BWG Fantastic Cleaner against similar products and mixtures at removing Hucker's Soil from different substrates.
Experimental Procedure:	The four cleaners that were used were BWG Fantastic Cleaner, TURI Fantastic V4, Fabuloso, and Dr. Bronner's All Purpose. The three substrates were ceramic, stainless steel, and polycarbonate. Three coupons of each substrate were cleaned by each cleaner, making 36 coupons in total. Initial weights of each coupon were taken, and then a thin layer of soil was added down the middle of the coupon. They sat to dry for two hours, then the dirty weights were taken. The SLW (straight-line washing unit) was used to clean the contaminant one coupon at a time. The SLW ran for 20 cleaning cycles (30 seconds of manual cleaning). After, the coupons sat for 10 minutes, and then clean weights were taken.

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Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	% Cont Removed	Average % Removal	Average Cleaner %
BWG Fantastic OG	Ceramic	0.2233	0.0025	98.88	94.50	94.06
		0.2511	0.0059	97.65		
		0.1374	0.0179	86.97		
	Stainless Steel	0.069	0.0047	93.19	93.62	
		0.0441	0.0024	94.56		
		0.0682	0.0047	93.11		
	Polycarbonate	0.2034	0.0099	95.13	91.38	
		0.2439	0.0076	96.88		
		0.183	0.0327	82.13		
Fantastic V4	Ceramic	0.1447	0.0089	93.85	89.47	88.72
		0.1313	0.0074	94.36		
		0.1374	0.0272	80.20		
	Stainless Steel	0.1434	0.0181	87.38	87.96	
		0.1771	0.01	94.35		
		0.1966	0.0351	82.15		
	Polycarbonate	0.179	0.0181	89.89	92.21	
		0.1947	0.0055	97.18		
		0.1848	0.0193	89.56		
Fabuloso	Ceramic	0.0876	0.0043	95.09	93.10	92.97
		0.0308	0.0025	91.88		
		0.1512	0.0116	92.33		
	Stainless Steel	0.132	0.0094	92.88	92.85	
		0.1226	0.0117	90.46		
		0.1169	0.0056	95.21		
	Polycarbonate	0.1299	0.0257	80.22	77.39	
		0.1289	0.0414	67.88		
		0.1456	0.0232	84.07		
Dr. Bronner's All Purpose	Ceramic	0.1054	0.0166	84.25	92.27	93.25
		0.1248	0.0026	97.92		
		0.0804	0.0043	94.65		
	Stainless Steel	0.0954	0.0014	98.53	94.23	
		0.1444	0.0185	87.19		
		0.1155	0.0035	96.97		
	Polycarbonate	0.1448	0.02	86.19	89.93	
		0.118	0.0175	85.17		
		0.1141	0.0018	98.42		

Summary:

Substrates:	Ceramics, Plastic, Stainless Steel
Contaminants:	Hucker's Soil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Brazilian Womens Group	Fantastic Multi-Cleaner Original	100	94.06	☑	Cleaner gets cloudy over time.
Colgate-Palmolive Company	Fabuloso (2x Concentrated Forumula)	8	92.97	☑	
Dr. Bronner's	Dr. Bonner's 18-in-1 Hemp Pure Castile Soap	6	93.25	☑	
Brazilian Womens Group	Fantastic Multicleaner Version 4		88.72	☑	

Conclusion:

All of the cleaners were efficient at removing Hucker's soil. The original BWG Fantastic DIY Cleaner did the best overall, with Dr. Bronner's All-Purpose dilution right behind it. Dr. Bronner's could be a more cost-effective and less time-consuming replacement for the DIY cleaner.