

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2025

DateRun: 06/26/2025

Experimenters: Tatyanna Moreland Junior, Cindy McClaughlin

ClientType: Community Group

ProjectNumber: Project #2

Substrates: Ceramics, Plastic, Stainless Steel

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods:

Analytical Methods: Gravimetric

Purpose: To test the efficacy of the Brazilian Women's Group's original Fantastic DIY All-Purpose Cleaner against Fabuloso All-Purpose, Dr. Bronner's All-Purpose Dilution, and TURI's reformulation of the Fantastic All-Purpose Cleaner.

Experimental Procedure: Thirty-six coupons, three per substrate for each cleaner, had initial weights taken and then were soiled with about 1 g of Hucker's Soil. Coupons dried at room temperature (68°F) for 2 hours before their dirty weights were recorded for the adjusted dry weight. The four cleaning mixtures and dilutions were prepared beforehand. Three coupons of the same substrate were placed in a Single Line Washing Unit (SLW) with a Wypall X60 wipe attached to the cleaning sled. The wipe and coupons were sprayed three times with the cleaner, and the SLW was then run for 20 cleaning cycles (30 seconds of manual cleaning). Coupons dried for 10 minutes at room temperature before final weights were recorded.

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Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	Average % Removal	Average Cleaner %
Fantastic V4	Ceramic	0.6590	0.3314	49.71	56.39	41.49
		0.6886	0.1900	72.41		
		0.6834	0.3618	47.06		
	Stainless Steel	0.7338	0.5109	30.38	26.58	
		0.7642	0.4862	36.38		
		0.6366	0.5539	12.99		
	Polycarbonate	0.9613	0.6132	36.21	40.88	
		0.8318	0.5231	37.11		
		0.9496	0.4814	49.30		
Dr. Bronner's All-Purpose Dilution	Ceramic	0.7936	0.1833	76.90	61.21	39.65
		0.7502	0.3336	55.53		
		0.6672	0.3256	51.20		
	Stainless Steel	0.6863	0.5504	19.80	18.09	
		0.6273	0.3516	43.95		
		0.7873	0.8620	-9.49		
	Polycarbonate	0.6785	0.4114	39.37	28.81	
		0.7005	0.3056	56.37		
		0.8119	0.8876	-9.32		
Fabuloso	Ceramic	0.7532	0.1996	73.50	52.29	40.81
		0.7100	0.3743	47.28		
		0.6080	0.3885	36.10		
	Stainless Steel	0.3684	0.3092	16.07	29.32	
		0.5746	0.4180	27.25		
		0.7370	0.4080	44.64		
	Polycarbonate	0.7291	0.6437	11.71	27.38	
		0.6471	0.3631	43.89		
		0.8363	0.6144	26.53		
BWG Org. Fantastic Multi-Cleaner	Ceramic	0.4561	0.2316	49.22	44.93	23.53
		0.6686	0.3494	47.74		
		0.5522	0.3434	37.81		
	Stainless Steel	0.7759	0.7450	3.98	2.13	
		0.6615	0.6613	0.03		
		0.6961	0.6795	2.38		
	Polycarbonate	0.6545	0.8591	-31.26	12.11	
		0.7759	0.4720	39.17		
		0.7568	0.5416	28.44		

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Summary:

Conclusion:

Our variation of the BWG's Fantastic Multipurpose Cleaner, Fantastic V4, did the best of the 4 cleaners and worked second best on ceramic substrate. Fabuloso and Dr. Bronner's all purpose dilutions worked as well as. There was some soil clumping on the third coupon for stainless steel and polycarbonate that led to negative removal weights and could have done better in a different cleaning method.