CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 09/14/2021

Experimenters: Zoe Lawson, Nicole Kebler

ClientType:

ProjectNumber: Project #3

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: SSL Soil 1 Bathroom Soap Scum

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Podsy in the removal of SLL Soil 1 Bathroom Soap Scum from various substrates.

Experimental Procedure: Eighteen pre-weighed coupons, three of each substrate per cleaner, were each contaminated with 0.5 grams of bathroom soil (28.6% All-in-one shampoo and conditioner, 21.4% Dry skin lotion, 21.4% Liquid Hand Soap, 14.3% Liquid body wash, 7.2% Deodorant bar soap, 7.1% Water). The coupons were dried for 24 hours at room temperature (68 F). Once dried, the dirty weights of the coupons were recorded. The Podsy solution was then created by placing a solution pod into a spray bottle and filling it with cold water (~50^{o}F). The solution was allowed to sit for 2 minutes and then was shaken to mix the solution parts together. Three coupons of the same substrate were then aligned into a Single Line Washing Unit (SLW) with a Wypall X60 attached to the cleaning sled. Each Wypall X60 cloth and coupon received 2 sprays of the Podsy solution. The Single Line Washing Unit (SLW) was then activated for 20 repetitions, simulating 20 manual wipes. This was repeated for each substrate until all of the coupons were cleaned. The clean coupons were then allowed to dry overnight at room temperature before the final weights were recorded.

Results:

Cleaner	Substrate	Initial wt. of Cont.	Final wt. of Cont	Average	Combined Average	Overall Average
Podsy Bathroom (1 pack per spray bottle)	Ceramic	0.5043	0.0015	99.70	99.73	99.04
		0.5071	-0.0003	100.06		
		0.5043	0.0029	99.42		
	Plastic	0.5049	0.0104	97.94	97.97	
		0.5265	0.0095	98.20		
		0.5238	0.0117	97.77		
	Chrome	0.5021	0.0036	99.28	99.42	
		0.5770	0.0031	99.46		
		0.5146	0.0025	99.51		
Lysol Power Bathroom Cleaner (RTU)	Ceramic	0.5145	0.0022	99.57	99.53	97.15
		0.5094	0.0011	99.78		
		0.5209	0.0040	99.23		
	Plastic	0.5283	0.0098	98.14	97.93	
		0.5026	0.0087	98.27		
		0.5088	0.0134	97.37		
	Chrome	0.5089	0.0270	94.69	93.99	
		0.5179	0.0365	92.95		
		0.5208	0.0296	94.32		

Summary:

Substrates:	Ceramics, Plastic, Chrome
Contaminants:	SSL Soil 1 Bathroom Soap Scum

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Big 3 Packaging	Podsy Bathroom Cleaning System	1 pack per spray bottle	99.04	☑	
Reckitt Benckiser	Lysol Power Bathroom Cleaner	100%	97.15	☑	

Conclusion: Both cleaners were effective at removing bathroom soil from ceramic, plastic, and chrome. Podsy Bathroom Cleaner was found to be slightly more effective with an overall removal average of 99%, while Lysol Power Bathroom Cleaner had an overall removal average of 97%.

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