CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017

DateRun: 10/01/2017

Experimenters: George Liang, Vinh Tran, Hayley Byra, Ashley Shanley

ClientType:

ProjectNumber: Project #1

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate supplied products for the removal of bathroom soil from ceramic, plastic, and chrome surfaces.

Experimental Procedure: Pre-weighed ceramic, plastic, and chrome coupons were soiled with a half a gram each of bathroom soil using a hand held swab. The coupons were allowed to dry for 24 hours at room temperature before reweighing and cleaning. Three of the same type of coupon were placed into a Gardner Straight Line Washability unit. A Wypall X60 reinforced wipe was attached to the cleaning sled and soaked with 1 spray of desired cleaning solutions. Each coupon was sprayed once with the same cleaning solution. Both cleaning solutions were made by using the premeasured packets provided by the vendor and diluting it with one quart of water, and shook to mix. The solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit for 20 cycles.

Results: Table pertaining to the amount of contaminant added and removed using a gravimetric scale to measure the efficacy of the respective cleaners.

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	Avg % Cont Removed	Overall Cont Removed
Basin Tub & Tile Cleaner	Ceramic	0.2142	0.0190	91.13	88.18	90.24
		0.2304	0.0285	87.63		
		0.2326	0.0331	85.77		
	Plastic	0.2328	0.0208	91.07	92.43	
		0.2128	0.0172	91.92		
		0.2165	0.0123	94.32		
	Chrome	0.2141	0.0167	92.20	90.11	
		0.2168	0.0248	88.56		
		0.2217	0.0231	89.58		
Accu Pak Bathroom & Bowl Cleaner	Ceramic	0.2277	0.0208	90.87	90.49	92.97
		0.2182	0.0214	90.19		
		0.2221	0.0213	90.41		
	Plastic	0.2661	0.0099	96.28	97.75	
		0.2972	0.0052	98.25		
		0.2478	0.0032	98.71		
	Chrome	0.2194	0.0171	92.21	90.68	
		0.2310	0.0212	90.82		
		0.2239	0.0246	89.01		

Summary:

Substrates:	Ceramics, Plastic, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Fisher Scientific	Absolute Ethanol		90.24	☑	

Conclusion: Basin Tub & Tile Cleaner compared closely with the comparative cleaner, Accu Pak Bathroom & Bowl Cleaner, with respective values of 90.24% and 92.97%.