CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 07/13/2021

Experimenters: Ross Goding, Edward Judge

ClientType: Lab

ProjectNumber: Project #4

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Clorox Liquid Bleach in the removal of Bathroom Soil from various substrates.

Experimental Procedure: A Clorox Liquid Bleach solution was created by mixing 4 (mL) parts liquid bleach and 192 (mL) parts water. Then, 3 coupons of each substrate (ceramic, plastic, chrome) were collected and initial weights were taken. Bathroom Soil was applied to each coupon and allowed to air dry for 24 hours. After the 24 hour dry time, the weights of the newly contaminated coupons were measured. All coupons were placed into a Gardner-scrub Abrasion Tester machine. Wypall cleaning cloths were attached to each of the 3 cleaning blocks used for the test. Each Wypall cloth and all coupons received 2 sprays of the Clorox Liquid Bleach solution and the Gardner-scrub Abrasion Tester was run for 20 repetitions, simulating 20 manual wipes. Once cleaning concluded, the cleaned coupons were allowed to air dry for 24 hours. After 24 hours, the weights of the cleaned coupons were measured.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Clorox Liquid Bleach	Ceramic	0.1050	0.0090	91.43	84.68	78.18
		0.1590	0.0127	92.01		
		0.2020	0.0784	61.19		
	Plastic	0.1827	0.0108	94.09	76.94	
		0.1937	0.0115	94.06		
		0.2306	0.1322	42.67		
	Chrome	0.1989	0.0344	82.70	72.92	
		0.2141	0.0408	80.94		
		0.2163	0.0971	55.11		

Summary:

Substrates:	Ceramics, Plastic, Chrome				
Contaminants:	Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Clorox Company	Clorox Bleach	1/48	78.18	☐	Clorox Liquid Bleach was not effective in the removal of Bathroom Soil from various substrates.

Conclusion: Clorox Liquid Bleach showed little success in the removal of Bathroom Soil from ceramic, plastic, and chrome substrates.