CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 08/01/2021

Experimenters: Ross Goding, Edward Judge

ClientType: Lab

ProjectNumber: Project #4

Substrates: Ceramics, Plastic, Painted metal

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Ajax Powder Cleanser in the removal of Hucker's Soil from various substrates.

Experimental Procedure: Ajax Powder Cleanser and a spray bottle of water were gathered to begin testing. Then, 3 coupons of each substrate (ceramic, plastic, painted metal) were collected and initial weights were taken. Hucker's Soil (Creamy Peanut Butter, Salted Butter, Wheat gluten, Egg Yolk, Evaporated milk, DI water, Printer's ink with boiled linseed oil, India Ink, Saline Solution) was applied to each coupon and allowed to air dry for 2 hours. After the 2 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 water and Ajax Powder Cleanser was sprinkled across each coupon. 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
Ajax Powder Cleanser	Ceramic	0.2341	0.0437	81.33	76.86	69.77
		0.1980	0.0241	87.83		
		0.2054	0.0249	87.88		
	Plastic	0.2773	0.1375	50.41	58.60	
		0.3283	0.1448	55.89		
		0.3896	0.1189	69.48		
	Painted Metal	0.4290	0.2209	48.51	73.84	
		0.3275	0.0464	85.83		
		0.3101	0.0398	87.17		

Summary:

Substrates:	Ceramics, Plastic, Painted metal				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Colgate-Palmolive Company	Ajax with Bleach (Powder)	100%	69.77	☐	Ajax Powder with Bleach was not effective in the removal of Hucker's Soil from various substrates.

Conclusion: Ajax Powder Cleanser showed little success in the removal of Hucker's Soil from ceramic, plastic, and painted metal coupons.