CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2020
DateRun:	06/10/2020
Experimenters:	Alicia McCarthy, Hayley Byra
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Painted metal
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Visual
Purpose:	To evaluate the effectiveness of all purpose cleaners at the removal of Hucker's soil.
Experimental Procedure:	Two cleaners (409 All Purpose and L'AVANT All Purpose) were received “Ready to Use” (RTU). Eighteen pre-weighed coupons, three of each substrate per cleaner, were soiled with one gram of Hucker’s Soil (Evaporated milk 26.5%, Creamy Peanut Butter 17%, Salted Butter 17%, Stone ground wheat flour 17%, Linseed oil 2.25%, Saline solution 5.25%, India Ink 6.8%, Lemon Juice 8.2%) and aged for 2 hours at room temperature (68˚F). Dirty weights were recorded before placing three coupons of the same substrate onto the Straight Line Washability (SLW) unit. A KC Wypall was attached to the SLW sled and treated with two sprays of the same cleaning solution. The cleaning unit was run for 20 cycles (equivalent of 30 seconds of manual cleaning). Coupons were air dried at room temperature (68˚F) overnight before final weights were recorded.

Results:

Cleaner	Substrate	Initial Wt. of Cont.	Final Wt. of Cont.	% Cont. Removed	% Average	Overall % Average
Clorox 409 All Purpose Cleaner	Painted Steel	0.2022	0.0073	96.39	97.05	97.39
		0.2158	0.0088	95.92		
		0.2218	0.0026	98.83		
	Ceramic	0.2349	0.0048	97.96	98.09	
		0.2467	0.0050	97.97		
		0.2393	0.0040	98.33		
	Plastic	0.2642	0.0122	95.38	97.05	
		0.2443	0.0058	97.63		
		0.2593	0.0048	98.15		
ANR L'AVANT All Purpose Cleaner	Painted Steel	0.1757	0.0132	92.49	94.99	94.84
		0.1756	0.0077	95.62		
		0.1890	0.0059	96.88		
	Ceramic	0.1919	0.0031	98.38	97.78	
		0.1934	0.0052	97.31		
		0.2003	0.0047	97.65		
	Plastic	0.2232	0.0389	82.57	91.73	
		0.1843	0.0065	96.47		
		0.2030	0.0078	96.16		

Summary:

Substrates:	Ceramics, Plastic, Painted metal				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
L'AVANT Collective	L'AVANT Collective All Purpose Cleaner	100	94.84	☑	
Clorox Company	409 (Multi-Surface Cleaner)	100	97.39	☑	

Conclusion: Both cleaners were effective at removing Hucker's soil on painted steel, ceramic, and plastic.