CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2019
DateRun:	06/30/2019
Experimenters:	Nicole Kebler
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Painted metal
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric, Visual
Purpose:	To evaluate the effectiveness of Better Life Wipes and comparative products for removing Hucker's Soil on Ceramic, Plastic and Painted Metal coupons.
Experimental Procedure:	Nine pre-weighed coupons, three of each substrate per cleaner, were soiled with 0.5g 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 two hours at room temperature (68˚F). Dirty weights recorded before placing three coupons of the same substrate onto the Straight-Line Washability (SLW) unit. The cleaner wipe was attached to the SLW sled and cleaned for 20 cycles (equivalent of 30 seconds of manual cleaning). Coupons air dried at room temperature (68 F) overnight before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt. of cont.	Final wt. cont.	% Cont. Removed	% Average Removal	Overall % Removal
1	Plastic	0.3300	0.0500	84.84	64.11	59.67
		0.3000	0.1700	43.33		
		0.5300	0.1900	64.15		
	Ceramic	0.2400	0.1300	45.83	48.36	
		0.3000	0.0800	73.33		
		0.2700	0.2000	25.92		
	Painted Steel	0.3100	0.1500	51.61	66.53	
		0.4400	0.1100	75.00		
		0.3700	0.1000	72.97		
2	Plastic	0.3600	0.0200	94.44	92.29	71.17
		0.3800	0.0300	92.10		
		0.3100	0.0300	90.32		
	Ceramic	0.3100	0.1000	67.74	64.91	
		0.3200	0.1400	56.25		
		0.4100	0.1200	70.73		
	Painted Steel	0.3900	0.0900	76.92	56.31	
		0.4100	0.2200	46.34		
		0.4600	0.2500	45.65		
3	Plastic	0.2024	0.0131	93.52	94.97	86.92
		0.3587	0.0100	97.18		
		0.3958	0.0230	94.18		
	Ceramic	0.2825	0.0895	68.31	69.15	
		0.3923	0.1339	65.86		
		0.4782	0.1279	73.25		
	Painted Steel	0.5199	0.0206	96.04	96.65	
		0.4232	0.0128	96.97		
		0.4505	0.0138	96.93		

Summary:

Substrates:	Ceramics, Plastic, Painted metal
	Hucker's Soil

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Contaminants:					
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Better Life	Naturally Filth Fighting Cleaning Wipes	100%	59.67	☐	
Seventh Generation	Disinfecting Wipes	100%	71.17	☐	
Clorox Company	Green Works Compostable Cleaning Wipes	100%	86.92	☑	

Conclusion: Better Life Wipes were not as effective as the comparative cleaners.