CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2019

DateRun: 11/05/2019

Experimenters: Zoe Lawson, Othon Pagounes, Tatyanna Moreland Junior

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Plastic, Painted metal

PartType: Part

Contaminants: Hucker's Soil, Food

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate two all-purpose cleaners on the effectiveness of removing Hucker's Soil on ceramic, plastic and painted metal surfaces.

Experimental Procedure: Eighteen pre-weighed coupons, three for each substrate per cleaner, were contaminated with 0.5 g of Hucker's soil (44.2% Distilled water, 13.5% Evaporated milk, 8.8% Salted butter, 8.8% Stone ground wheat flour, 8.8% Egg yolk, 0.9% Printer's ink with boiled linseed oil, 2.7% Saline solution, 3.5% India ink) distributed onto each coupon. The dirty weights were recorded after the coupons had dried for two hours at room temperature (68°F). Three coupons of the same substrate were aligned into a Single Line Washing Unit (SLW) with Wypall X60 attached to the cleaning sled. The Wypall X60 reinforced wipe along with the coupons were all sprayed three times with the cleaner and then allowed to soak for 30 seconds. Afterwards the Single Line Washing Unit (SLW) was activated and cleaned for 20 cycles. The clean coupons were all then allowed to dry overnight at room temperature before the final weights were recorded.

Results:

Cleaner	Substrate	Initial wt. of cont. (g)	Final wt. of cont. (g)	% Cont. Removed	Average % Content Removed	Overall Average % Content Removed
Cleanyst All Purpose Cleaner	Ceramic	0.5370	0.0292	94.56	88.66	91.57
		0.3009	0.0493	83.62		
		0.5839	0.0712	87.81		
	Plastic	0.4914	0.0290	94.10	92.94	
		0.4666	0.0357	92.35		
		0.3821	0.0291	92.38		
	Painted Metal	0.3311	0.0336	89.85	93.10	
		0.5185	0.0440	91.51		
		0.5199	0.0107	97.94		
Mrs. Meyers Lemon Verbene Multi Surface Cleaner	Ceramic	0.3797	0.0376	90.10	89.77	92.83
		0.4886	0.0482	90.14		
		0.5863	0.064	89.08		
	Plastic	0.5574	0.0532	90.46	90.66	
		0.5964	0.039	93.46		
		0.6387	0.0763	88.05		
	Painted Metal	0.5811	0.0101	98.26	98.06	
		0.5089	0.0037	99.27		
		0.5887	0.0198	96.64		

Summary:

Substrates:	Ceramics, Plastic, Painted metal				
Contaminants:	Hucker's Soil, Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Sprayway Inc. (PLZ)	Lemon Fine Free Oven Cleaner XL 200	100	93.00	☑	92.83
Cleanyst	Cleanyst All Purpose	100	92.00	☑	91.57

Conclusion: The Cleanyst All Purpose Cleaner and the Mrs. Meyers Lemon Verbene Multi Surface Cleaner are equally effective in cleaning multiple surfaces.