CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2019

DateRun: 08/20/2019

Experimenters: Meet Patel

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the effectiveness of Annie's All-Purpose cleaner to a comparative product at removing Hucker's soil from various substrates.

Experimental Procedure: Eighteen pre-weighed coupons, three per substrate for each cleaner, was contaminated with ~0.05 - 0.1 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%) for each cleaner. Coupons aged for two hours at room temperature (68°F) before dirty weights were recorded. Coupons of the same substrate were placed into the Straight-Line Washability (SLW) unit, three at time, and treated once with the cleaner. A Wypall was attached to the SLW sled and treated twice with the cleaner. Each test ran 20 cycles (~30 seconds of cleaning). Coupons air-dried at room temperature (68°F) for one hour before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt. of Cont.	Final wt. Cont.	% Cont. Removed	Average% Removal	Overall % Removal
1	A	0.0730	0.0037	94.93	91.43	84.31
		0.0470	0.0060	87.23		
		0.0368	0.0029	92.12		
	B	0.0705	0.0130	81.56	86.02	
		0.0445	0.0081	81.80		
		0.0339	0.0018	94.69		
	C	0.0579	0.0150	74.10	75.49	
		0.0233	0.0048	79.40		
		0.0300	0.0081	73.00		
2	A	0.0524	0.0055	89.50	85.12	84.31
		0.0449	0.0086	80.85		
		0.0387	0.0058	85.02		
	B	0.1219	0.0147	87.94	84.02	
		0.1063	0.0133	87.49		
		0.0779	0.0182	76.64		
	C	0.3680	0.0198	94.62	83.79	
		0.0817	0.0121	85.19		
		0.1515	0.0431	71.55		

Visual Observations: All tested substrates showed visible streaking and any residual soil that was left over, took on solid form.

Summary:

Substrates:	Ceramics				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Annie's Pure and Simple	Annie's Pure and Simple All Purpose Cleaner - Pink Grapefruit	100	84.31	☑	
Method	Method All-Purpose Pink Grapefruit	100	84.31	☑	

Conclusion: Annie's Pure and Simple All-Purpose Cleaner was as effective as Method All-Purpose at removing Hucker's Soil from ceramic, plastic, and painted metal.