CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2019

DateRun: 06/27/2019

Experimenters: Adorrah-Le Khan

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 Better Life Nursery and comparative product of removing Hucker's Soil from painted steel, plastic, and ceramic.

Experimental Procedure: Nine pre-weighed coupons, three of each substrate per cleaner, were coated with 0.5 grams of Hucker's Soil (44.2% distilled water, 13.5% evaporated milk, 8.8% creamy peanut butter, 8.8% salted butter, 8.8% egg yolk, .9% printer ink with linseed oil, 2.7% saline solution and 3.5% India ink) using a swab. The coupons were air dried for two hours at room temperature (68˚F) before recording contaminated weights. For each cleaner, three coupons of the same substrate were placed into the Straight-Line Washability (SLW) Unit, and a Kimberly-Clark Wypall reinforced paper towel was attached to the cleaning sled. The cleaner was sprayed twice on the Wypall and on each coupon before cleaning for 20 cycles (equivalent to 30 seconds of cleaning). Coupons air dried for 24 hours before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% Average	Overall % Average
Better Life Nursery	Painted Metal	0.3880	0.0702	81.91	83.17	81.25
		0.3978	0.0731	81.62		
		0.4140	0.0580	85.99		
	Plastic	0.3537	0.0628	82.24	84.63	
		0.4143	0.0719	82.65		
		0.3731	0.0410	89.01		
	Ceramic	0.4107	0.0564	86.27	75.95	
		0.3912	0.1311	66.49		
		0.4097	0.1020	75.10		
Honest Baby Multi-Surface	Painted Metal	0.4236	0.1294	69.45	47.80	58.09
		0.3628	0.2858	21.22		
		0.4218	0.1994	52.73		
	Plastic	0.3752	0.1477	60.63	55.70	
		0.3842	0.1746	54.55		
		0.3817	0.1835	51.93		
	Ceramic	0.4112	0.1485	63.89	70.76	
		0.3912	0.1298	66.82		
		0.3765	0.0694	81.57		

Summary:

Substrates:	Ceramics, Plastic, Painted metal				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Better Life	Better Life Naturally Mess Conquering Nursery Cleaner	100%	81.25	☑	
The Honest Company, Inc.	Baby Multi-Surface Cleaner	100%	58.09	☐	

Conclusion: Better Life Nursery was more effective at removing Hucker's soil from multiple surfaces.