CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2015

DateRun: 05/04/2015

Experimenters: Alicia Melvin, Michael McDermott

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Plastic, Steel

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To test the cleaning quality of two different cleaners on multiple substrates soiled with Hucker Soil.

Experimental Procedure: Three coupons of three types of substrates were used for each cleaner; polycarbonate, painted steel, and ceramic. Initial weights were recorded and then each coupon was coated with 1 gram of Hucker Soil (Distilled water 44.2%, Evaporated milk 13.5%, Creamy peanut butter 8.8%, Salted butter 8.8%, Stone ground wheat flour 8.8%, Egg yolk 8.8%, Printer's ink with boiled linseed oil 0.9%, Saline solution 2.7% and India Ink 3.5%). The coupons were dried overnight, and dirty weights were recorded the next day. The coupons were tested on the abrasion manual cleaner machine. Three coupons of the same substrate were tested at the same time for one type of cleaner. One spray of the cleaner was applied to each coupon on the soiled surface and then sprayed once on the two layered WypAll paper towel connected to the manual machine cleaner. The coupons were then wiped 20 times with the machine and then placed back on the tray to dry overnight. This process was repeated for each set of substrates. The coupons dried overnight, and the final weights were recorded.

Chemistries Evaluated: Fresh 4 Pets RS020315A-2 (RS3-260); Shout Pets Stain and Odor Removal

Results:

Cleaners	Substrate	Coupon #	Initial wt	Final wt	%Removed	Average	Std Dev
Fresh 4 Pets	Polycarbonate	113	0.8472	0.0247	97.08	95.77	2.58
Fresh 4 Pets	Polycarbonate	97	0.7025	0.0181	97.42		
Fresh 4 Pets	Polycarbonate	7	0.7624	0.0549	92.80		
Fresh 4 Pets	Painted Steel	27	0.7456	0.0389	94.78	92.19	2.32
Fresh 4 Pets	Painted Steel	2	0.9959	0.0963	90.33		
Fresh 4 Pets	Painted Steel	32	0.7688	0.0657	91.45		
Fresh 4 Pets	Ceramics	22	0.7915	0.0707	91.07	88.45	7.57
Fresh 4 Pets	Ceramics	23	0.7893	0.1585	79.92		
Fresh 4 Pets	Ceramics	24	0.8459	0.0477	94.36		
Shout Pets	Polycarbonate	11	0.9905	0.1129	88.60	89.5	2.55
Shout Pets	Polycarbonate	49	0.7733	0.0966	87.50		
Shout Pets	Polycarbonate	1	0.8184	0.0624	92.37		
Shout Pets	Painted Steel	22	0.7331	0.0748	89.79	88.44	3.25
Shout Pets	Painted Steel	18	0.6186	0.0945	84.72		
Shout Pets	Painted Steel	5	0.7774	0.0716	90.79		
Shout Pets	Ceramics	25	0.7751	0.1342	82.69	86.63	5.25
	Ceramics	26	0.8309	0.1279	84.61		

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Shout Pets							
Shout Pets	Ceramics	28	0.8736	0.0647	92.59		

Summary:

Substrates:	Ceramics, Plastic, Steel				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
SC Johnson & Son Inc	Shout Carpet Oxy - Stain & odor remover	100	88.19	☑	
Fisher Scientific	Absolute Ethanol	0	0.00	☐	
Fisher Scientific	Absolute Ethanol	0	0.00	☐	
Fetch 4 Pets	Fetch 4 Pets RS020315A-2 (RS3-260)	100	92.13	☑	

Conclusion: Overall, Fresh 4 Pets RS020315A-2 (RS3-260) removed more of the soil than the Shout Pets Stain and Odor Removal.