CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2011

DateRun: 01/04/2011

Experimenters: Johnny Le

ClientType: General

ProjectNumber: Project #1

Substrates: Ceramics, Fiberglass, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate additional products for bathroom cleaning using manual wiping.

Experimental Procedure: The supplied cleaning products were used at the recommended concentration. Preweighed chrome, ceramic and fiberglass, coupons were coated with SSL Soil 1 (Bathroom soap scum: All-in-one shampoo and conditioner 28.6%, Dry skin lotion 21.4%, Liquid hand soap 21.4%, Liquid body wash 14.3%, Deodorant bar soap 7.2% and water 7.1%.) using a hand held swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.

Three coupons were placed into a Gardner Straight Line Washability unit. A Wypall X60 reinforced wipe was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded and efficiencies were calculated and recorded.

Products were selected based on kitchen cleaning needs and health and safety options.

Results: The additional four products selected for bathroom cleaning had efficiencies that were greater than 90%. .The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed	Overall Average
All Purpose N-1 Chrome				
	0.0131	0.0012	90.84	92.63
	0.0306	0.0017	94.44	
	0.0591	0.0015	97.46	
All Purpose N-1 Ceramic				
	0.0693	-0.0002	100.29	
	0.0603	0.0050	91.71	
	1.4140	0.3768	73.35	
All Purpose N-1 Fiber Glass				
	0.1506	0.0127	91.57	
	0.0911	0.0030	96.71	
	0.1312	0.0035	97.33	
MD Stetson PC 101 Chrome				
	0.0540	0.0019	96.48	95.53
	0.0621	0.0017	97.26	
	0.0543	0.0032	94.11	
MD Stetson PC 101 Ceramic				
	0.0583	0.0001	99.83	
	0.0602	0.0063	89.53	
	0.0496	0.0016	96.77	
MD Stetson PC 101 Fiber Glass				
	0.0939	0.0067	92.86	
	0.1066	0.0001	99.91	
	0.1252	0.0088	92.97	
Cogent DFC Kitchen Spray Chrome				
	0.0327	0.0001	99.69	97.27
	0.0302	0.0001	99.67	
	0.0295	0.0004	98.64	

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Cogent DFC Kitchen Spray Ceramic				
	0.0570	0.0068	88.07	
	0.0690	0.0022	96.81	
	0.0552	0.0008	98.55	
Cogent DFC Kitchen Spray Fiber Glass				
	0.1264	0.0037	97.07	
	0.1381	0.0026	98.12	
	0.0838	0.0010	98.81	
MD Stetson Lav Safe Chrome				
	0.0629	0.0028	95.55	92.16
	0.0455	0.0021	95.38	
	0.0541	0.0025	95.38	
MD Stetson Lav Safe Ceramic				
	0.0615	0.0034	94.47	
	0.0537	0.0000	100.00	
	0.9138	0.2928	67.96	
MD Stetson Lav Save Fiber Glass				
	0.0670	0.0025	96.27	
	0.0869	0.0116	86.65	
	0.0768	0.0017	97.79	

Summary:

Substrates:	Ceramics, Fiberglass, Chrome
Contaminants:	Films, Soaps

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
The Clean Environment Co	All Purpose N-1	12	92.63	☑	
Next-Gen Supply Group	PC 101 Neutral and Glass Cleaner	2	95.53	☑	
Cogent Environmental Solutions	DFC Kitchen Spray	100	97.27	☑	
Next-Gen Supply Group	LAV Safe 8	33	92.16	☑	

Conclusion: Several products from both bathroom trials were found to be more effective than the current product.