CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2010
DateRun:	08/10/2010
Experimenters:	Jason Marshall, Timothy Weil
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate the supplied products for bathroom cleaning using manual cleaning
Experimental Procedure:	The supplied cleaning products were used at the recommended concentration. Preweighed chrome, ceramic, fiberglass and porcelain, 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 handheld 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.
Results:	The supplied cleaner was found to leave a lot of residue behind when following the traditional laboratory testing procedures. When incorporating an added wet wipe following cleaning, efficiency improved. The table lists the amount of soil added, the amount remaining and efficiency for each coupon cleaned. Observations of residue levels were recorded as well.

Cleaner	Initial wt	Final wt	% Removed
Soft Scrub - ceramic			
	0.1470	0.2653	-80.48
	0.1319	0.2980	-125.93
	0.0904	0.1948	-115.49
Soft Scrub - chrome			
	0.0981	0.1303	-32.82
	0.1159	0.1420	-22.52
	0.1411	0.2073	-46.92
Soft Scrub - fiberglass			
	0.1716	0.3055	-78.03
	0.1745	0.3415	-95.70
	0.1412	0.4011	-184.07
Soft Scrub - porcelain			
	0.0874	1.0597	-1112.47
	0.1384	1.2257	-785.62
	0.1844	0.7915	-329.23
New Leaf Bathroom - ceramic			
	0.1179	0.7002	-493.89
	0.2013	1.5344	-662.25
	0.1711	0.9910	-479.19
New Leaf Bathroom - chrome			
	0.1883	1.3036	-592.30
	0.1977	1.9480	-885.33
	0.2728	1.1985	-339.33

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New Leaf Bathroom - fiberglass			
	0.1474	0.0175	88.13
	0.2362	0.0209	91.15
	0.1324	0.0199	84.97
New Leaf Bathroom - porcelain			
	0.1217	0.0076	93.76
	0.1757	0.0056	96.81
	0.1613	0.0045	97.21
Activeion - ceramic			
	0.2253	0.0133	94.10
	0.1825	0.0110	93.97
	0.2541	0.0157	93.82
Activeion - chrome			
	0.2299	0.0657	71.42
	0.2278	0.0488	78.58
	0.2019	0.0426	78.90
Activeion - fiberglass			
	0.1299	0.0261	79.91
	0.0986	0.0112	88.64
	0.1756	0.0100	94.31
Activeion - porcelain			
	0.2844	0.0380	86.64
	0.2958	0.0347	88.27
	0.1647	0.0344	79.11
Comet Bathroom Cleaner - ceramic			
	0.2001	0.1453	27.39
	0.1275	0.0500	60.78
	0.1177	0.1684	-43.08
Comet Bathroom Cleaner - chrome			
	0.1298	1.0195	-685.44
	0.1306	1.2009	-819.53
	0.1508	0.7020	-365.52
Comet Bathroom Cleaner - fiberglass			
	0.1203	0.0074	93.85
	0.1077	0.0073	93.22
	0.1249	0.0048	96.16
Comet Bathroom Cleaner - porcelain			
	0.1267	0.0193	84.77
	0.0841	0.0164	80.50
	0.0729	0.0150	79.42

Summary:

Substrates:	Ceramics, Fiberglass, Chrome
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Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Henkel Corporation	Soft Scrub with Bleach	100	72.90	☐	with wipe
Activeion Cleaning Solutions LLC	Activeion Pro	100	93.10	☑	
Prestige Brands Inc	Comet Bathroom Cleaner	100	82.54	☐	
New Leaf Clean LLC	New Leaf All Purpose Cleaner	100	68.90	☐	

Conclusion: The supplied product had an overall average efficiency less than 85% but compared consistently with the thicker conventional cleaning product.