CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	07/10/2008
Experimenters:	Jason Marshall, Shweta Bansal
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate three supplied products for bathroom cleaning following GS 37 requirements
Experimental Procedure:	Two of the three supplied cleaning product were diluted to vendor recommended concentrations for bathroom cleaning using DI water (32:1 and 128:1%). The third product was prepared following the specified procedure - oxygenating cold tap water for about 10 minutes. Preweighed fiberglass, ceramic, chrome and composite floor tiles coupons were coated with SSL Soil 1 (Bathroom soap scum: Vaseline Dry Skin Lotion 21.4%, Dial Clean Rinsing Body Wash 14.3%, Market Basket Shampoo & Conditioner (Pert)28.6%, Soft Soap Natural Liquid hand soap 21.4%, Coast 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 Kimberly-Clark Wypal reinforced paper towel 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 cleaning unit was run for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, efficiencies were calculated and recorded.
Results:	All three products were successful in removing the bathroom soil from the four substrates. Overall efficiencies were above 90%. The table lists the amount of soil added, the amount remaining after cleaning and the calculated efficiency for each coupon cleaned.

Substrate	Cleaner	Initial wt	Final wt	% Removed
ceramic	Lotus	0.3671	0.1062	71.07
		0.2130	0.0394	81.50
		0.2677	0.0200	92.53
ceramic	Pleascent	0.2195	0.0100	95.44
		0.1925	0.0017	99.12
		0.2007	0.0006	99.70
ceramic	Compass	0.0947	0.0062	93.45
		0.2045	0.0187	90.86
		0.1395	0.0064	95.41
chrome	Lotus	0.1733	0.0066	96.19
		0.1910	0.0050	97.38
		0.1328	0.0055	95.86
chrome	Pleascent	0.2044	0.0295	85.57
		0.2579	0.0465	81.97
		0.3367	0.1314	60.97
chrome	Compass	0.2222	0.0096	95.68
		0.1072	0.0127	88.15
		0.2188	0.0071	96.76
fiberglass	Lotus	0.2320	0.0187	91.94
		0.1619	0.0009	99.44
		0.2008	0.0071	96.46
fiberglass	Pleascent	0.1435	0.0139	90.31
		0.3196	0.0075	97.65
		0.2581	0.0280	89.15
fiberglass	Compass	0.2619	0.0012	99.54

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		0.2055	0.0028	98.64
		0.2147	0.0186	91.34
composit tile	Lotus	0.1480	0.0014	99.05
		0.1094	0.0094	91.41
		0.0829	0.0042	94.93
composit tile	Pleascent	0.0856	0.0005	99.42
		0.1355	0.0123	90.92
		0.2460	0.0248	89.92
composit tile	Compass	0.1578	0.0116	92.65
		0.1556	0.0157	89.91
		0.1232	0.0110	91.07

Summary:

Substrates:	Ceramics, Plastic, Fiberglass, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Tersano	Lotus Sanitizing System	100	92.31	☑	
Triple S	Pleascent Neutra Shine	3.12	90.01	☑	
Triple S	Compass	0.78	93.62	☑	

Conclusion:

The Lotus Sanitizing System was found to be effective for removing the bathroom soil from various surfaces using manual wiping. It compared well to the two other cleaning products supplied for testing.