CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 03/20/2003

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Fiberglass, Chrome

PartType: Coupon

Contaminants: Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Photography

Purpose: To evaluate supplied cleaner on first janitorial soil and three substrates

Experimental Procedure: One supplied cleaning product was diluted to 10% for bathroom cleaning. The product was diluted with DI water. Three preweighed fiberglass, three ceramic and three chrome 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 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. Photographs were taken. Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag 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 and a second set of photographs were taken. Efficiencies were calculated and recorded.

Results: The cleaning solutions had little difficulty with SSL Soil 1 on all three substrates. The table below lists the amount of soil added and removed.

Table 1. Soil Removal

Cleaner	Initial wt	Final wt	% Removed
Fiberglass-SSL1	0.163	0.0005	99.69
	0.1418	0.0004	99.72
	0.1961	0.0016	99.18
Ceramic-SSL1	0.1298	0.0056	95.69
	0.2123	0.0347	83.66
	0.085	0.0108	87.29
Chrome-SSL1	0.078	0.0012	98.46
	0.0236	0.0024	89.83
	0.0521	0.0014	97.31

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Pollux Company	Force 9	10	99.53	☑	Fiberglass
Pollux Company	Force 9	10	88.88	☑	Ceramics
Pollux Company	Force 9	10	95.20	☑	Chrome

Conclusion: The overall efficiency for the bathroom cleaner, Force 9, was 94.54, passing the cut off of 85%. The same product will be tested next on SSL Soil 2.