CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 04/13/2004

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Photography

Purpose: To evaluate newly supplied cleaner on SSL Soil 1

Experimental Procedure: Two supplied cleaning product were diluted to vendor recommended concentration for bathroom cleaning (2oz/gal). The product was diluted with DI water. Six preweighed ceramic 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 Bi-O-Kleen product removed 10% more soil from the coupons than the Clean Environment product did. The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Bi-O-Kleen AP	0.1219	0.008	93.44
	0.2133	0.0361	83.08
	0.1892	0.0349	81.55
Clean Env AP N-13	0.1585	0.0315	80.13
	0.1635	0.0432	73.58
	0.1994	0.0461	76.88

Summary:

Substrates:	Ceramics
Contaminants:	Films, Soaps

Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Bi-O-Kleen Industries	Bi-O-Kleen Cleaner & Degreaser	2	86.02	☑	
The Clean Environment Co	All Purpose N-1	2	76.86	☐	

Conclusion: A third product will be tested under the same conditions when it arrives at the laboratory.